** Revised **

**Tuesday, January 27, 2026**
701 East Carson Street, Carson, CA 90745
Helen Kawagoe Council Chambers, 2nd Floor
6:30 p.m.

# AGENDA
# REGULAR MEETING OF THE
# PLANNING COMMISSION

| | | | |
|---|---|---|---|
| Members: | Dianne Thomas<br>Chair | Louie Diaz<br>Vice Chair | Frederick Docdocil |
| | Carlos Guerra | Del Huff | DeQuita Mfume |
| | Clarence Johnson | Leticia Wilson | |
| Alternates: | Jaime Monteclaro | | |
| Staff: | Nathan Freeman<br>Community and Economic Development Director | McKina Alexander<br>Planning Manager | Chris Palmer, AICP<br>Economic Dev. Manager |
| | Benjamin Jones<br>Asst. City Attorney | Laura Gonzalez<br>Planning Secretary | |

**This Agenda and corresponding staff reports can be found on the City of Carson website at www.carsonca.gov**

***"In accordance with the Americans with Disabilities Act of 1990, if you require a disability related modification or accommodation to attend or participate in this meeting, including auxiliary aids or services, please call the City Clerk's office at 310-952-1720 at least 48 hours prior to the meeting." (Government Code Section 54954.2)***

**PUBLIC INFORMATION**

**The public may address the members of the Planning Commission on matters within the jurisdiction of the Planning Commission or on any items on the agenda of the Planning Commission during the designated public comment periods. There will be two oral communication sessions: one for Agendized Items (comment about items ON the agenda) and the other non-Agendized items (comment about items NOT on the agenda). The Oral Communications portion of the agenda is limited to a duration of one hour unless otherwise approved by the Planning Commission. Comment time is normally 3 minutes depending on the number of speakers.**

**IF YOU ARE NOT ABLE TO ATTEND THE MEETING IN-PERSON, PUBLIC COMMENTS CAN BE SUBMITTED BEFORE THE MEETING VIA:**

- **Email: planning@carsonca.gov** (up to 3 hours prior to the start of the meeting).
- **Written:** Delivered to the Planning Division at City Hall (up to 3 hours prior to the start of the meeting).

Emailed and written comments received by the Planning Division may not be read aloud during the meeting but will be provided to the Board and incorporated into the record.

**PUBLIC VIEWING OF THIS MEETING WILL BE AVAILABLE BY:**

- **Livestream: www.carsonca.gov**
- **YouTube: www.youtube.com/@CityofCarsonCalifornia**
- **Cable TV: Spectrum (Channel 35) and ATT (Channel 99)**

**RULES OF DECORUM:**

1. *No person attending a Public Meeting shall engage in disorderly or boisterous conduct, including but not limited to applause, whistling, stamping of feet, booing, or making any loud, threatening, profane, abusive, personal, impertinent, or slanderous utterance-that disturbs, disrupts, or otherwise impedes the orderly conduct of the meeting.*
2. *All remarks by members of the public shall be addressed to the Mayor or the Chair and not to any other member of the public or to any single Council, Board or Commission Member unless in response to a question from that Member.*
3. *Signs, placards, banners, or other similar items shall not be permitted in the audience during a Public Meeting if the presence of such item disturbs, disrupts or otherwise impedes the orderly conduct of the meeting.*
4. *All persons attending a Public Meeting shall remain seated in the seats provided, unless addressing the body at the podium or entering or leaving the meeting.*
5. *All persons attending a Public Meeting shall obey any lawful order of the Presiding Officer to enforce the Rules of Decorum.*

- *Treat everyone courteously*
- *Listen to others respectfully*
- *Exercise self-control*
- *Give open-minded consideration to all viewpoints*
- *Focus on the issues and avoid personalizing debate*
- *Embrace respectful disagreement and dissent as democratic rights that are inherent components of an inclusive public process and rolls for forging sound decisions*

## 1. CALL TO ORDER: PLANNING COMMISSION

## 2. ROLL CALL

## 3. FLAG SALUTE

## 4. ORAL COMMUNICATIONS FOR MATTERS NOT LISTED ON THE AGENDA

The public may at this time address the members of the Planning Commission on any matters within the jurisdiction of the Planning Commission. No action may be taken on non-agendized items except as authorized by law. Speakers are requested to limit their comments to no more than three minutes each, speaking once.

## 5. ORAL COMMUNICATIONS FOR NON-PUBLIC HEARING ITEMS LISTED ON THE AGENDA (MEMBERS OF THE PUBLIC)

The public may at this time address the members of the Planning Commission on any matters within the jurisdiction of the Planning Commission. No action may be taken on non-agendized items except as authorized by law. Speakers are requested to limit their comments to no more than three minutes each, speaking once.

## 6. APPROVAL OF MINUTES

6.A. APPROVAL OF MINUTES - DECEMBER 9, 2025 (REGULAR MEETING)
RECOMMENDED ACTION

— APPROVE the minutes as listed.

6.B. APPROVAL OF MINUTES - DECEMBER 17, 2025 (SPECIAL MEETING)
RECOMMENDED ACTION

— APPROVE the minutes as listed.

## 7. NEW PUBLIC HEARING

7.A. CONSIDER ADOPTING A RESOLUTION RECOMMENDING CITY COUNCIL APPROVAL OF AN ADDENDUM TO THE GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT AND ADOPTION OF THE CARSON CIVIC CENTER SPECIFIC PLAN
RECOMMENDED ACTION

— 1. CONDUCT a public hearing on the Carson Civic Center Specific Plan (SP No. 01-26) and related Addendum to the 2040 General Plan Update EIR; and

— 2. ADOPT Resolution No. 26-2897, "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THAT THE CITY COUNCIL APPROVE AN ADDENDUM TO THE CARSON 2040 GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT AND ADOPT THE CARSON CIVIC CENTER SPECIFIC PLAN (SP No. 01-26)."

7.B. PUBLIC HEARING TO CONSIDER ADOPTION OF RESOLUTION NO. 26-2898, RECOMMENDING CITY COUNCIL APPROVAL OF AN AMENDED AND RESTATED DEVELOPMENT AGREEMENT NO. 23-19 BETWEEN THE CITY OF CARSON, IMPERIAL AVALON, LLC, AND LENNAR HOMES OF CALIFORNIA, LLC FOR A MIXED-USE PROJECT LOCATED AT 21207 SOUTH AVALON BOULEVARD
RECOMMENDED ACTION

— 1. OPEN the public hearing, TAKE public comment, and CLOSE the public hearing; and

— 2. ADOPT Planning Commission Resolution No. 26-2898, “A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THE CARSON CITY COUNCIL APPROVE AMENDED AND RESTATED DEVELOPMENT AGREEMENT NO. 23-19 BETWEEN THE CITY OF CARSON, IMPERIAL AVALON, LLC, AND LENNAR HOMES OF CALIFORNIA, LLC FOR A MIXED-USE PROJECT LOCATED 21207 SOUTH AVALON BOULEVAD”.

## 8. MANAGER'S REPORT

## 9. ORAL COMMUNICATIONS (COMMISSIONERS)

## 10. ADJOURNMENT

*Date Posted: January 22, 2026*

# Report to Planning Commission

Tuesday, January 27, 2026, 6:30 PM

APPROVAL OF MINUTES 6A.

| | |
|---|---|
| TO: | Planning Commission |
| FROM: | McKina Alexander, Planning Manager |
| PREPARED BY: | Laura Gonzalez, Planning Secretary |
| SUBJECT: | APPROVAL OF MINUTES - DECEMBER 9, 2025 (REGULAR MEETING) |

## I. SUMMARY

The Planning Division is seeking approval of the following minutes:

- Tuesday, December 9, 2025 (Regular Meeting)

## II. RECOMMENDATION

APPROVE the minutes as listed.

## III. ATTACHMENTS

1. Minutes, December 9, 2025

**Attachments**

Minutes 12-9-25.pdf

**CITY OF CARSON**
**MINUTES**
**PLANNING COMMISSION**
**DECEMBER 9, 2025**

## 1. CALL TO ORDER: PLANNING COMMISSION

The meeting was called to order at 6:30 p.m. by Chair Dianne Thomas in the Helen Kawagoe Council Chambers, Carson City Hall, 701 E. Carson Street, Carson, California 90745.

## 2. ROLL CALL

Planning Secretary Laura Gonzalez noted the roll:

Planning Commissioners Present: Chair Dianne Thomas, Commissioner Del Huff, Commissioner DeQuita Mfume, Commissioner Clarence Johnson, Commissioner Jaime Monteclaro, Commissioner Leticia Wilson, Commissioner Frederick Docdocil

Planning Commissioners Absent: Vice Chair Louie Diaz, Commissioner Carlos Guerra

Also Present: Community and Economic Development Director Nathan Freeman, Planning Manager McKina Alexander, Associate Planner Aaron Whiting, Assistant City Attorney Benjamin Jones

## 3. FLAG SALUTE

Commissioner Docdocil led the Pledge of Allegiance.

## 4. ORAL COMMUNICATIONS FOR MATTERS NOT LISTED ON THE AGENDA

None.

## 5. ORAL COMMUNICATIONS FOR NON-PUBLIC HEARING ITEMS LISTED ON THE AGENDA (MEMBERS OF THE PUBLIC)

None.

## 6. APPROVAL OF MINUTES

6.A. APPROVAL OF MINUTES - NOVEMBER 25, 2025

RECOMMENDED ACTION

— 1. APPROVE the minutes as listed.

**Motion To Approve submitted by DeQuita Mfume seconded by Del Huff resulting in 6-0-1-0-0 Abstained by Frederick Docdocil**

## 7. NEW PUBLIC HEARING

7.A. Site Plan and Design Review (DOR) No. 1959-24

RECOMENDED ACTION

— 1. ADOPT Resolution No. 25-2894, entitled "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON FINDING A CEQA EXEMPTION AND CONDITIONALLY APPROVING SITE PLAN AND DESIGN OVERLAY REVIEW NO. 1959-24 FOR THE DEVELOPMENT OF EIGHT DETACHED DWELLING UNITS AT 21135 ½ BOLSA STREET. (APN 7334003021)"

Associate Planner Whiting - The notice was posted at the site in November. We became aware that the signage had deteriorated or had been removed. It was posted again once I was notified.

Commissioner Huff - What was the actual time that the sign was posted for?

Associate Planner Whiting - I'm not aware of when it was not there any longer. It was posted again this week once I became aware.

Commissioner Docdocil - You mentioned that there was a request from one of the neighbors to have a community meeting which was declined by the applicant. Was there a reason why it didn't happen?

Associate Planner Whiting - The resident expressed concerns with the project but did not request a meeting. Staff recommended that the meeting take place. I believe at the time they were looking for direction from the Planning Commission.

Director Freeman - The Planning Commission has been very clear in the past about their expectations of community meetings specifically those that are residential.

Commissioner Johnson - It says in the project description that our traffic engineer reviewed and approved the project. I didn't know there was a need for a traffic study.

Associate Planner Whiting - It was reviewed by our traffic engineer. I believe the idea of it going back for further analysis would be to go above and beyond to ensure that there are no impacts.

Commissioner Monteclaro - Will this establish precedence so that community meetings must be conducted prior to the public hearing?

Planning Manager Alexander - The Planning Commission gave us this direction years ago. We have since set the precedent regarding this action. As a result of this, we have also incorporated this in our Phase 1 Zoning Code Update. This is an established path that we have done for years, and we made sure it's in our new code.

Chair Thomas - It was recommended that there be a community meeting and it was declined, why?

Jefferson Choy (Architect) - The owner thought that this could be addressed here since there was only one phone call that was brought up. He didn't think that a community meeting was necessary.

Commissioner Monteclaro - Can you share the concern of that resident?

Jerry Fieldsman (Applicant's Representative) - We had one call, but we don't know what the concern was or who to contact. The owner didn't see a need for a community meeting. He can share his concern here and we can address it. We made an initial effort to contact the people on Foxwell, but we felt we were not going in the right direction.

Wayne Hall (Resident) - I'm assuming this will be a two-year project with heavy equipment dragging mud and debris throughout the neighborhood that only has one entrance and has no direct access to main boulevards. Environmental pollution such as dust, diesel fumes, VOCs, and silica would be unavoidable due to excavation, demolition, material use, and machinery. During rainy seasons there is going to be muddy runoff with only one drain in the system. No matter which way the bulldozers, excavators, and skid loaders access our area, they need to go over multiple speed bumps going in and out of the project. The noise created from large machinery to dig down will be very loud. City of Carson allows construction to occur between 7:00 a.m. to 8:00 p.m. on weekdays and 8:00 a.m. to 8:00 p.m. during holidays. The excess traffic poses a direct hazard for us. Most likely part of the road and sidewalks will be removed to add electrical, sewage, and water lines to the new project. Parking is going to be a nightmare between the employees of the construction company and the residents. The signage was misleading. This is not a low-density residential zone. The sign does not state that this project would directly impact and adversely affect the residents on Foxwell Avenue.

Yvonne Ramos (Resident) - There's an elementary school right off 213th. We already have a lot of traffic. Our neighborhood will change with the construction. They didn't do their due diligence.

Joselyn Bada (Resident) - One of the main reasons why everyone purchased a house on Foxwell Avenue was because of the safer private area, fewer houses, and limited traffic. The problem

is the increased traffic, decrease in privacy, increase in crime, lowering our house value, overburdening local sewers, water supplies, and storm drains.

Commissioner Wilson - Our commission has had the practice of having community meetings making every effort to bring the parties together so that we consider mitigating some issues before it's presented to the commission. We are here to serve the public and to ensure that our processes are as transparent as possible and that we provide the community with an opportunity to come forward. I want to thank all the members of the community who took their time from their busy schedules to come here to voice their opinions and concerns.

Chair Thomas - I visited your community and it's beautiful. This is a major decision that has to be made about this vacant property. This item will be continued and a community meeting must happen. We are recommending to staff that there be a traffic study done. There are safety and construction concerns as it relates to the size of the trucks that would be going through there. Residential streets are not built for these trucks to constantly go through for a long period of time.

**Motion to Continue to a date to be determined submitted by Leticia Wilson seconded by Del Huff resulting in 7-0-0-0-0 with direction that a community meeting be held and that a traffic study be prepared**

7.B. A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THAT THE CITY COUNCIL MAKE FINDINGS PURSUANT TO CEQA GUIDELINES SECTIONS 15162 AND 15168(c)(2) AND ADOPT GENERAL PLAN AMENDMENT NO. 03-25, AN AMENDMENT TO THE NOISE ELEMENT OF THE CITY'S GENERAL PLAN TO CLARIFY ITS ALIGNMENT WITH EXISTING LANGUAGE IN THE CITY'S NOISE ORDINANCE AND TO ESTABLISH CLEAR STANDARDS FOR NEW DEVELOPMENT PROJECTS WHILE PROTECTING THE COMMUNITY NOISE ENVIRONMENT

RECOMMENDED ACTION

— 1. CONDUCT a Public Hearing; and

— 2. ADOPT Resolution No. 25- 2895, entitled "RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THAT THE CITY COUNCIL MAKE FINDINGS PURSUANT TO CEQA GUIDELINES SECTIONS 15162 AND 15168(c)(2) AND ADOPT GENERAL PLAN AMENDMENT NO. 03-25, AN AMENDMENT TO THE NOISE ELEMENT OF THE CITY'S GENERAL PLAN TO CLARIFY ITS ALIGNMENT WITH EXISTING LANGUAGE IN THE CITY'S NOISE ORDINANCE AND TO ESTABLISH CLEAR STANDARDS FOR NEW DEVELOPMENT PROJECTS WHILE PROTECTING THE COMMUNITY NOISE ENVIRONMENT"

**Motion To Approve submitted by Leticia Wilson seconded by Frederick Docdocil resulting in 7-0-0-0-0**

## 8. MANAGER'S REPORT

Director Nathan Freeman - I would like to thank staff for their hard work in getting these reports to you. Our goal is to give you good information so you can make informed decisions on behalf of this community. Thank you for your service to the City of Carson. Happy holidays everyone.

## 9. ORAL COMMUNICATIONS (COMMISSIONERS)

Commissioner Monteclaro – To all the residents, we appreciate your presence. I wish everyone a Merry Christmas.

Commissioner Johnson - I'm happy to be here and happy to see the community coming out to exercise our processes.

Commissioner Mfume – It's a pleasure to be here. This commission cares about the community. Happy holidays to everyone.

Commissioner Wilson - Thank you to my colleagues for their continued service on this commission. Thank you staff for doing your due diligence, for bringing us information, and great reports. Happy holidays.

Commissioner Docdocil - It's always exciting to see the community at these meetings. I go to St. Philomena Church and we're having a concert and a tree lighting ceremony this coming Saturday. This is another opportunity to get together as a community in celebration of the holiday season.

Commissioner Huff - It's important that Carson residents know that they are being heard. This has been a wonderful year, happy holidays.

Chair Thomas - It has been an incredible year. We continue to grow and build. We are mindful of our residents and businesses. We have to coexist, and we make sure we consider everyone that's involved.

Planning Manager Alexander - I want to formally say thank you to the commission as I was dealing with my mom and her subsequent death. I appreciate those that reached out to me and said kind words. Thank you for your concern and care. Have a wonderful holiday season and happy New Year. Remember to love your family and friends. We only have this life, use it well.

Assistant City Attorney Jones - Thank you commissioners for your service this year. Another wonderful year working with the Planning Commission. Thank you to the staff, amazing as always, happy holidays.

Chair Thomas - To all the staff that you don't see, we want to say happy holidays. There will be a toy giveaway on Friday the 12th at Veteran's Park located at 22400 Moneta Avenue. We had a very successful Winter Fest. I've never seen so many kids in one place. We want to continue to celebrate all the things that the City Council brings to this city for its residents. Be kind to one another, love one another, and be safe. Happy holidays.

## 10. ADJOURNMENT

The meeting was adjourned by Chair Dianne Thomas at 6:56 p.m.

_____

Dianne Thomas, Chairperson

Attest

_____

Laura Gonzalez, Secretary

# Report to Planning Commission

Tuesday, January 27, 2026, 6:30 PM

APPROVAL OF MINUTES 6B.

| | |
|---|---|
| TO: | Planning Commission |
| FROM: | McKina Alexander, Planning Manager |
| PREPARED BY: | Laura Gonzalez, Planning Secretary |
| SUBJECT: | APPROVAL OF MINUTES - DECEMBER 17, 2025 (SPECIAL MEETING) |

PROJECT/APPLICATION INFORMATION

## I. SUMMARY

The Planning Division is seeking approval of the following minutes:

- Wednesday, December 17, 2025

## II. RECOMMENDATION

APPROVE the minutes as listed.

## III. ATTACHMENTS

1. Minutes, December 17, 2025

**Attachments**

Minutes 12-17-25.pdf

**CITY OF CARSON**

**MINUTES**

**SPECIAL PLANNING COMMISSION MEETING**

**DECEMBER 17, 2025**

## 1. CALL TO ORDER: PLANNING COMMISSION

The meeting was called to order at 6:30 p.m. by Chair Dianne Thomas in the Helen Kawagoe Council Chambers, Carson City Hall, 701 E. Carson Street, Carson, California 90745.

## 2. ROLL CALL

Planning Secretary Laura Gonzalez noted the roll:

Planning Commissioners Present: Chair Dianne Thomas, Vice Chair Diaz, Commissioner Del Huff, Commissioner DeQuita Mfume, Commissioner Clarence Johnson, Commissioner Jaime Monteclaro

Planning Commissioners Absent: Commissioner Carlos Guerra, Commissioner Frederick Docdocil, Commissioner Leticia Wilson

Also Present: Community and Economic Development Director Nathan Freeman, Planning Manager McKina Alexander, Assistant Planner Jacob Collins, Associate City Attorney Minhvy Vu

## 3. FLAG SALUTE

Vice Chair Diaz led the Pledge of Allegiance.

## 4. ORAL COMMUNICATIONS FOR MATTERS NOT LISTED ON THE AGENDA

None.

## 5. ORAL COMMUNICATIONS FOR NON-PUBLIC HEARING ITEMS LISTED ON THE AGENDA (MEMBERS OF THE PUBLIC)

None.

## 6. CONSENT

6.A. REQUEST FOR A ONE-YEAR TIME EXTENSION OF PROJECT ENTITLEMENT DOR NO. 1785-19 TO COMPLY WITH CONDITIONS OF APPROVAL

RECOMMENDED ACTION

— CONSIDER RESOLUTION NO. 25-2896 OF THE PLANNING COMMISSION OF THE CITY OF CARSON APPROVING A ONE-YEAR EXTENSION OF TIME OF EFFECTIVENESS OF SITE PLAN

AND DESIGN REVIEW 1785-19 REVISION #2, PERTAINING TO REAL PROPERTY LOCATED AT 2625 E. CARSON STREET

**Motion To Approve submitted by Del Huff seconded by Jaime Monteclaro resulting in 6-0-0-0-0**

## 7. MANAGER'S REPORT

Community and Economic Development Director Freeman - Happy holidays!

Planning Manager Alexander - A pleasure to work with everyone. Thank you for taking the time to be here. We appreciate your willingness to work with staff.

## 8. ORAL COMMUNICATIONS (COMMISSIONERS)

Assistant City Attorney Minhvy Vu - I'm happy to be here. I want to wish everyone a happy holiday season, safe travels, and enjoy time with your friends and family.

Commissioner Huff - It's a pleasure to be here this evening. Happy holidays to everybody.

Commissioner Monteclaro - I have many blessings to be thankful for and having dinner tonight was one of them. Merry Christmas and happy holidays.

Commissioner Johnson - Happy to be here. Happy holidays.

Commissioner Mfume - Thank you for dinner, it was very thoughtful. Happy holidays to everyone. Enjoy your family and be safe. We are looking forward to seeing you next year.

Vice Chair Diaz - Happy holidays.

Chair Thomas - Happy holidays, be safe, Merry Christmas, and Happy New Year. We're looking forward to seeing all of you at the beginning of the year.

## 9. ADJOURNMENT

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The meeting was adjourned by Chair Dianne Thomas at 6:37 pm.

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Dianne Thomas, Chairperson

Attest

_____

Laura Gonzalez, Secretary

# Report to Planning Commission

Tuesday, January 27, 2026, 6:30 PM

NEW PUBLIC HEARING 7A.

| | |
|---|---|
| TO: | Planning Commission |
| FROM: | Nathan Freeman, Director of Community and Economic Development |
| PREPARED BY: | Nathan Freeman, Director of Community and Economic Development<br>McKina Alexander, Planning Manager |
| SUBJECT: | CONSIDER ADOPTING A RESOLUTION RECOMMENDING CITY COUNCIL APPROVAL OF AN ADDENDUM TO THE GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT AND ADOPTION OF THE CARSON CIVIC CENTER SPECIFIC PLAN |

PROJECT/APPLICATION INFORMATION

| | |
|---|---|
| Project Summary: | Carson Civic Center Specific Plan (SP No. 01-26) |
| Project Location: | 701 and 801 E. Carson Street. The existing Civic Center campus, is generally bounded by 213th Street to the north, Avalon Boulevard to the west, Carson Street to the south, and extends eastward approximately 100 feet west of Garston Avenue, along Desford Street and the internal Civic Plaza access drive. |

## I. OVERVIEW

The proposed Carson Civic Center Specific Plan (Exhibit No. 3; “CCC Specific Plan”) establishes a comprehensive regulatory and policy framework to guide the long-term revitalization and redevelopment of the City’s Civic Center. The CCC Specific Plan implements the goals and policies of the City of Carson 2040 General Plan by creating a cohesive vision for civic, cultural, residential, hospitality, and mixed-use development centered around the Civic Center as the symbolic and functional heart of the City.

The Civic Center is not currently within the area of any Specific Plan, and the current zoning of the Civic Center is Downtown Mixed Use (DMX). The proposed CCC Specific Plan is intended to be an overlay to the existing base zoning district. The underlying DMX zoning already permits the mix of civic, residential, commercial, cultural, and mixed-use development contemplated by the Civic Center Specific Plan. As such, no zone change is necessary to authorize the proposed uses.

The proposed CCC Specific Plan would serve as the primary regulatory and policy document governing all development and zoning within the plan area. It would establish customized development standards, design guidelines, and implementation strategies that replace existing zoning designations and regulations. These tailored standards are intended to implement the City's and community's integrated vision by ensuring high-quality urban design, multi-modal circulation, and a strong, vibrant public realm. Development plans or agreements, tract or parcel maps, or any development or land use approval requiring ministerial or discretionary actions must be consistent with the Specific Plan. Any situation not specifically addressed by the Specific Plan would be subject to the requirements of the Carson Municipal Code (CMC), provided that such regulations are not in conflict with the objectives of the Specific Plan.

Following public review and consideration by the Planning Commission, staff recommends that the CCC Specific Plan be forwarded to the City Council with a recommendation for adoption.

## II. BACKGROUND

The Carson Civic Center has historically served as the administrative and symbolic center of the City, containing City Hall, the Community Event Center, surface parking, and associated open space. While these facilities continue to serve important civic functions, the area is characterized by aging infrastructure, fragmented circulation, and underutilized land.

In response, the City initiated preparation of the draft CCC Specific Plan to establish a long-range vision for reinvestment and phased redevelopment. The proposed CCC Specific Plan would reinforce the Civic Center as the symbolic and functional heart of the City while establishing a comprehensive regulatory framework to guide future public and potential private development. The proposed CCC Specific Plan includes a centralized public open space network anchored by the Jewel Plaza, preservation and adaptive reuse of the existing City Hall, development of a new City Hall facility, civic and cultural facilities, mixed-use residential development, a hotel or entertainment-oriented use, enhanced circulation, and structured and subterranean parking.

The proposed CCC Specific Plan was developed in coordination with City staff and consultants and reflects extensive analysis of land use, urban design, mobility, infrastructure, economics, and historic preservation. It integrates civic, cultural, residential, hospitality, and open space uses in a cohesive manner and ensures consistency with the City of Carson 2040 General Plan and the General Plan goals and complies with applicable provisions of the Carson Municipal Code including CMC Sections 9217.1 and 94111.1-94111.4 of the Carson Zoning Code. The Specific Plan complies with applicable provisions of California Government Code Sections 65450 – 65457, and includes all required contents described in Government Code Section 65451.

### CCC Specific Plan Area

The proposed CCC Specific Plan applies to a plan area of approximately 20 acres generally located along Carson Street and Avalon Boulevard that includes City Hall (1), surface parking lots (2, 3, 5), the Carson Community Event Center (4), Civic Center Drive (6), and Civic Plaza Drive (7), and associated open spaces, all of which is currently City-owned property. It does not include the Doubletree Hotel or the One Civic Plaza office building properties.

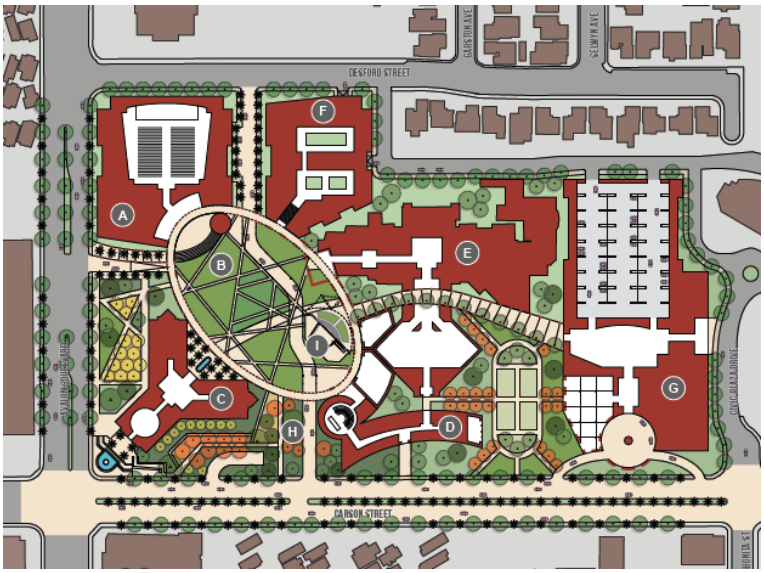
### Existing Site Plan




Site Plan Key Components

- Civic, cultural, and entertainment facilities including a performing arts center with main and black box theaters (A)
- Jewel Plaza: An iconic elliptical plaza that will serve as the primary anchor of the CCC Specific Plan. Envisioned uses within the Jewel Plaza include community events, concerts, recreation, fairs, and farmer's markets (B)
- Preservation and adaptive reuse of the existing City Hall to accommodate community services and potentially a cultural resource center (C)
- Construction of a new City Hall facility (D)
- Existing Event Center (E)
- Mixed-use residential development with retail/restaurant components and podium parking (F)
- A hotel or entertainment-oriented use, with optional interactive museum and immersive entertainment venue (G)
- Civil Rights Garden (H)
- Existing Amphitheater (I); and
- Centralized public open space network anchored by the Jewel Plaza.
- Structured and subterranean parking shared among the parcels, supplemented by podium parking for housing and hotel parcels.
- Enhanced pedestrian, bicycle, and vehicular circulation, including widened sidewalks, street trees, and mid-block crossings for pedestrian safety.
- Objective development and design standards governing building form, height, setbacks, frontage, and public realm design.
- Implementation over time via phased development parcels around an interconnected public realm network.

Proposed Plan Area Site Plan




Proposed Plan Area Rendering



Phased Approach

The CCC Specific Plan is designed to be implemented over time. The CCC Specific Plan envisions the plan area being divided into six proposed "development parcels" that include (1) the existing City Hall, (2) Performing Arts Center, (3) Mixed-Use Residential, (4) Existing Event Center, (5) Hotel and Entertainment Retail, and (6) the new City Hall and existing Event Center. These six "development parcels" would be in addition to, and oriented around, the Jewel Plaza Colonnade. By creating individual parcels around an interconnected public realm network, a phased parcel-by-parcel development approach would be allowed to occur over time as required or as possible.

It should be noted that the current legal parcels within the proposed plan area do not correspond to the "development parcels" envisioned in the CCC Specific Plan; one or more separate subdivision approval processes would be needed at a later date in order to create legal parcels that correspond to the "development parcels", and this would likely occur in connection with a proposal to develop the relevant "development parcel" consistent with the proposed Specific Plan. No proposed subdivision is before the Planning Commission at this time.

General Plan Consistency

City of Carson 2040 General Plan expressly identifies specific plans as implementation tools to achieve the General Plan's goals and policies. The CCC Specific Plan is consistent with the City of Carson 2040 General Plan and its goals, policies, and implementation measures, including those related to land use, economic vitality, placemaking, mobility, sustainability, and high-quality urban design.

## III. ENVIRONMENTAL REVIEW (CEQA)

Environmental review for the CCC Specific Plan was conducted in accordance with the California Environmental Quality Act (CEQA). Pursuant to CEQA Guidelines Section 15164, the City has prepared an Addendum (Exhibit No. 2) to the certified Environmental Impact Report (EIR) for the City of Carson 2040 General Plan Update (State Clearinghouse No. 2001091120, December 2022, available at www.carson2040.com), which was certified by the City on April 4, 2023.

The Addendum evaluates whether adoption of the CCC Specific Plan would result in new or more severe environmental impacts beyond those analyzed in the certified General Plan EIR. As demonstrated by the Addendum, impacts associated with the Modified Project (as described in the Addendum) and its entertainment retail option (which is an alternative to development of a hotel on that portion of the plan area) would be similar to or less than the impacts addressed in the certified General Plan EIR. With implementation of the Mitigation Measures identified in the Addendum, the Modified Project and its entertainment retail option would not result in new or increased significant impacts beyond those identified in the certified General Plan EIR, and do not trigger the need for a subsequent or supplemental EIR under Public Resources Code Section 21166 or CEQA Guidelines Sections 15162 and 15163.

Accordingly, Staff recommends that the Planning Commission make a recommendation to the City Council approving the Addendum based on the findings set forth in the proposed Resolution.

## IV. PUBLIC HEARING NOTICE

The agenda was posted at City Hall, and other public locations, no less than 72 hours prior to the Planning Commission meeting. A notice of Planning Commission public hearing was published in the newspaper on January 7 and 9, 2026, and was posted on-site and mailed to property owners and occupants within a 750' radius.

## V. CONCLUSION AND RECOMMENDATION

That the Planning Commission:

1. Conduct a public hearing on the Carson Civic Center Specific Plan and related Addendum to the 2040 General Plan Update EIR; and
2. ADOPT Resolution No. 26-2897, "A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THAT THE CITY COUNCIL APPROVE AN ADDENDUM TO THE CARSON 2040 GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT AND ADOPT THE CARSON CIVIC CENTER SPECIFIC PLAN."

## VI. ATTACHMENTS

1. Planning Commission Resolution No. 26-2897
2. Addendum to the City of Carson General Plan Update EIR (Exhibit A to Resolution)
3. Carson Civic Center Specific Plan (Exhibit B to Resolution)

**Attachments**

Reso 26-2897 (PC Resolution Recommending Adoption of Civic Center Specific Plan)(2079040.2).pdf
Addendum (Exhibit A to Resolution).pdf
25-1202_CarsonCivicCenterSpecificPlan (Exhibit B to Resolution).pdf

**CITY OF CARSON**

**PLANNING COMMISSION**

**RESOLUTION NO. 26-2897**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THAT THE CITY COUNCIL APPROVE AN ADDENDUM TO THE CARSON 2040 GENERAL PLAN UPDATE ENVIRONMENTAL IMPACT REPORT AND ADOPT THE CARSON CIVIC CENTER SPECIFIC PLAN**

**WHEREAS,** the City of Carson has prepared the proposed Carson Civic Center Specific Plan, attached hereto as Exhibit "B" and incorporated herein by this reference (the "Specific Plan") to establish a regulatory and policy framework to guide the long-term revitalization and redevelopment of the City's Civic Center; and

**WHEREAS,** the Specific Plan applies to a plan area of approximately 20 acres generally located along Carson Street and Avalon Boulevard and includes City Hall, the Community Event Center, surface parking lots, associated open spaces, Civic Center Drive, and Civic Plaza Drive, all of which is currently owned by the City; and

**WHEREAS**, the purpose of the Specific Plan is to reinforce the Civic Center as the symbolic and functional heart of the City by promoting a vibrant, pedestrian-oriented civic environment and by integrating civic, cultural, residential, hospitality, and mixed-use development in a cohesive manner; and

**WHEREAS,** the Specific Plan is intended to provide customized development standards, design guidelines, and implementation strategies for the plan area that ensure high-quality urban design, multimodal circulation, and a strong public realm. The Specific Plan would be the guiding document for all development standards and zoning for all properties within the plan area. The Development Standards set forth in the Specific Plan would replace the current zoning designations and standards for the plan area with customized standards designed to deliver development consistent with the City's and community's integrated vision. Development plans or agreements, tract or parcel maps, or any development or land use approval requiring ministerial or discretionary actions must be consistent with the Specific Plan. Any situation not specifically addressed by the Specific Plan would be subject to the requirements of the Carson Municipal Code (CMC), provided that such regulations are not in conflict with the objectives of the Specific Plan; and

**WHEREAS,** the Specific Plan includes, among other elements, a centralized public open space network anchored by the Jewel Plaza, preservation and adaptive reuse of the existing City Hall, development of a new City Hall facility, civic and cultural facilities, mixed-use residential development, a hotel or entertainment-oriented use, enhanced circulation, structured and subterranean parking, and objective development and design standards; and

**WHEREAS,** the City of Carson 2040 General Plan ("General Plan") expressly identifies specific plans as implementation tools to achieve the General Plan's goals and policies; and

**WHEREAS**, the Planning Commission has reviewed the Specific Plan and finds that it is consistent with the goals, policies, and implementation measures of the General Plan, including those related to land use, economic vitality, placemaking, mobility, sustainability, and high-quality

urban design; and

**WHEREAS**, environmental review for adoption of the Specific Plan is being conducted in accordance with the California Environmental Quality Act (CEQA). In accordance with CEQA Guidelines Section 15164, the City has prepared an Addendum to the Environmental Impact Report for the City of Carson 2040 General Plan Update (State Clearinghouse No. 2001091120, December 2022), which was certified by the City on April 4, 2023, pertaining to the Specific Plan; and

**WHEREAS**, a duly noticed public hearing on the Specific Plan was conducted by the Planning Commission at a regular meeting held on January 27, 2026, at which time all interested persons were given an opportunity to be heard; and

**WHEREAS**, the Planning Commission has reviewed and considered the staff report, the Addendum, the proposed Specific Plan, public testimony, and all other information presented in the record.

**NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF CARSON, CALIFORNIA, HEREBY FINDS, DETERMINES, DECLARES, AND RESOLVES AS FOLLOWS:**

**SECTION 1.** The Planning Commission finds that the foregoing recitals are true and correct and are incorporated herein by this reference.

**SECTION 2**. The Planning Commission finds as follows with respect to the Specific Plan:

A. The Specific Plan will contribute to the public health, safety, and general welfare or will be of benefit to the public.

B. The Specific Plan is consistent with the General Plan and the General Plan goals, and complies with applicable provisions of the Carson Municipal Code including CMC Sections 9217.1 and 94111.1-94111.4 of the Carson Zoning Code.

C. The Specific Plan complies with applicable provisions of California Government Code Sections 65450 – 65457, and includes all required contents described in Government Code Section 65451.

D. The Specific Plan retains the internal consistency of the General Plan and is consistent with other adopted plans.

E. The Specific Plan has been reviewed in compliance with CEQA and the requirements of Part 4 of the Carson Zoning Code. Based on the applicable environmental review, as detailed in the Addendum and Section 5 below, adoption of the Carson Civic Center Specific Plan would not result in substantial changes to the City's General Plan Update or to the circumstances under which the General Plan Update is being implemented due to any significant environmental impacts that were not identified in the General Plan Update Final EIR, or result in substantially more severe environmental effects.

F. All of the findings required by CMC 94111.2 can be and hereby are made with respect to recommended adoption of the Specific Plan.

**SECTION 3**. The Planning Commission finds as follows with respect to CEQA, based on its independent judgment after consideration of the whole of the administrative record:

In accordance with CEQA, the "Addendum to the Carson 2040 General Plan Update EIR – Civic Center Specific Plan," dated January 2026, which is attached hereto as Exhibit "A" and incorporated herein by reference ("Addendum"), analyzes the Modified Project as described in the Addendum, including the proposed Carson Civic Center Specific Plan with its entertainment retail option on a site analyzed as part of the General Plan Update (the "Modified Project"), and demonstrates that the Modified Project does not meet the standards that would require a Supplemental or Subsequent Environmental Impact Report ("EIR") pursuant to Public Resources Code ("PRC") Section 21166 or CEQA Guidelines Section 15162 and 15163.

As demonstrated by the discussion and analysis in the Addendum, the Modified Project would not result in new or increased significant impacts beyond those identified in the certified General Plan EIR, with implementation of the Mitigation Measures identified in the Addendum. Impacts associated with the Modified Project would be similar to or less than the impacts addressed in the Certified EIR, which is available at https://www.carson2040.com/. No substantial changes would occur with respect to the circumstances under which the Modified Project is undertaken that will require major revisions of the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, no new information of substantial importance has become available relative to any of the environmental topic categories that would result in new or more severe significant environmental impacts. In addition, the applicable mitigation measures included as part of the Certified EIR would continue to be implemented under the Modified Project, as conditioned pursuant to the conditions of approval. As all of the impacts of the Modified Project would be within the envelope of impacts analyzed in the Certified EIR, none of the conditions described in PRC Section 21166 and CEQA Guidelines Sections 15162 and 15163 requiring a Supplemental or Subsequent EIR would occur. Additionally, there are no known mitigation measures or project alternatives that were previously considered infeasible but are now considered feasible that would substantially reduce one or more significant effects on the environment identified in the Certified EIR. Therefore, the Modified Project would not create any potential adverse impacts beyond those evaluated in the Certified EIR. As such, the preparation of an addendum is appropriate and fully complies with the requirements of PRC Section 21166 and CEQA Guidelines Sections 15162, 15163, and 15164, and the Addendum properly does so.

The Modified Project was assessed in the Certified EIR; and pursuant to CEQA Guidelines 15162 and 15164, and the Addendum, no major revisions to the EIR are required and no subsequent EIR or negative declaration is required for approval of the Modified Project. Based on substantial evidence provided in the Addendum, the Planning Commission finds that some changes or additions to the Certified EIR are necessary in order to provide an environmental review of the Modified Project in accordance with the requirements of CEQA, but that none of the conditions described in CEQA Guidelines Section 15162 calling for the preparation of a subsequent EIR have occurred. The Addendum has been prepared in compliance with all requirements of CEQA and the CEQA Guidelines.

**SECTION 4**. Based on the foregoing, the Planning Commission recommends that the City Council conduct a duly noticed public hearing and thereafter approve the Addendum and adopt the Carson Civic Center Specific Plan, which is attached hereto as Exhibit "B" and incorporated herein by reference.

**SECTION 5**. This Resolution shall take effect immediately upon its adoption.

**SECTION 6**. The Secretary of the Planning Commission shall certify to the adoption of this Resolution.

**APPROVED** and **ADOPTED** THIS 27TH DAY OF JANUARY 2026.

**DIANNE THOMAS**
**CHAIRPERSON**

**ATTEST:**

**LAURA GONZALEZ**
**SECRETARY**

**Exhibit A: Addendum**
**Exhibit B: Specific Plan**

# ADDENDUM TO THE CARSON 2040 GENERAL PLAN UPDATE EIR

# CARSON CIVIC CENTER SPECIFIC PLAN

Prepared for

**CITY OF CARSON**
Community Development Department
Planning Division
701 East Carson Street
Carson, CA 90745

Prepared by

**TERRY A. HAYES ASSOCIATES INC.**
3535 Hayden Avenue, Suite 350
Culver City, CA 90232

January 2026

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# 1.0 INTRODUCTION

This document is an Addendum to the Environmental Impact Report (EIR) prepared for the Carson 2040 General Plan (General Plan Update) (State Clearinghouse No. 2001091120, December 2022), which was certified by the City of Carson (City) on April 4, 2023 (Certified EIR). In accordance with the California Environmental Quality Act (CEQA), this Addendum to the Certified EIR analyzes the proposed Carson Civic Center Specific Plan on a site analyzed as part of the General Plan Update (Specific Plan or Modified Project) and demonstrates that the Modified Project does not meet the standards for a Supplemental or Subsequent EIR pursuant to Public Resources Code (PRC) Section 21166 or CEQA Guidelines Section 15162 and 15163.

## 1.1 BACKGROUND

The City prepared an EIR pursuant to the CEQA for the General Plan Update to assess potential environmental impacts of the General Plan Update. The Project Area that was analyzed in the EIR consisted of the City and portions of the unincorporated County of Los Angeles located to the north (between Alondra Boulevard and Redondo Beach Boulevard) and northeast (north of Del Amo Boulevard and east of Wilmington Avenue) of the City boundaries. The unincorporated County areas that are part of the Planning Area is within the City's sphere of influence (SOI), which is defined in the Certified EIR as the ultimate physical boundary and service area of the City and encompasses territory that is envisioned to be the City's ultimate service area that could potentially be annexed into City limits. The EIR concluded that, with mitigation, all of the environmental impacts of the General Plan Update would be less than significant, except for significant and unavoidable environmental impacts related to Air Quality, Cultural Resources (Historic), and Transportation (VMT).

In April 2023, the City certified the EIR and approved the General Plan Update. Subsequent to approval of the General Plan Update, the Carson Civic Center Specific Plan has been proposed on a site analyzed as part of the General Plan Update. The Carson Civic Center Specific Plan provides regulatory tools and development concepts to implement the General Plan Update. These tools and concepts aim to achieve the vision and guiding principles of the General Plan Update.

As indicated in Section 2.0, Project Description for Modified Project, the Modified Project aims to provide a mix of residential, commercial, civic, entertainment/hospitality uses that aligns with the overall vision of the General Plan Update to create a City that is vibrant, diverse, and energetic and strategically locating new development with inviting spaces for working, living, dining, gathering, and recreation. The Modified Project also aligns with the General Plan Update guiding principles to promote a vibrant, safe, and walkable mixed-use neighborhood; increasing job and housing opportunities; encouraging regional-scale development and neighborhood-serving retail and amenities; promoting quality design; enhancing the public realm; and supporting a diversity of transportation modes and choices.

Both the Approved General Plan Update (as analyzed in the Certified EIR) and the Modified Project (analyzed in this Addendum) are discussed further below.

## 1.2 CEQA AUTHORITY FOR AN ADDENDUM

CEQA establishes the type of environmental documentation required when changes to a project occur after an EIR is certified. Specifically, Section 15164(a) of the CEQA Guidelines stated that:

> *The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation of a subsequent EIR have occurred.*

CEQA Guidelines Section 15162 requires the preparation of a Subsequent EIR when an EIR has been certified or a negative declaration has been adopted for a project and one or more of the following circumstances exist:

> *(1) Substantial changes are proposed in the project which, will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
>
> *(2) Substantial changes occur with respect to the circumstances under which the project is undertaken, which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
>
> *(3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the negative declaration was adopted, shows any of the following:*
>
> *(A) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
>
> *(B) Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
>
> *(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or*
>
> *(D) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*

Likewise, California PRC Section 21166 states that unless one or more of the following events occur, no Supplemental or Subsequent EIR shall be required by the lead agency or by any responsible agency:

(a) Substantial changes are proposed in the project which will require major revisions of the environmental impact report;

(b) Substantial changes occur with respect to the circumstances under which the project is being undertaken which will require major revisions in the environmental impact report; or

(c) New information, which was not known and could not have been known at the time the environmental impact report was certified as complete, becomes available.

As demonstrated by the analysis in this document, the Modified Project would not result in any new significant impacts and would not substantially increase the severity of previously identified significant impacts. Rather, all of the impacts associated with the Modified Project are within the envelope of impacts addressed in the Certified EIR and do not constitute a new or substantially increased significant impact. Therefore, the modifications resulting from the Modified Project do not meet the criteria for a Supplemental or Subsequent EIR pursuant to PRC Section 21166 and CEQA Guidelines Sections 15162 and 15163.

## 1.3 PURPOSE OF THIS ADDENDUM

The purpose of this Addendum to the General Plan Update Final EIR is to evaluate the environmental effects of the Modified Project and to document that the Modified Project would not result in substantial changes to the General Plan Update or to the circumstances under which the General Plan Update is being implemented due to any significant environmental impacts that were not identified in the General Plan Update Final EIR, or result in substantially more severe environmental effects. This document has been prepared in accordance with CEQA, specifically the *CEQA Guidelines* (Title 14, Cal. Code Regs., 15000 et seq.) Sections 15162 and 15164.

# 2.0 PROJECT DESCRIPTION FOR MODIFIED PROJECT

This section identifies the location of the Project Site, describes the Project Site and the surrounding area, and provides a detailed description of the Modified Project.

## 2.1 PROJECT LOCATION AND EXISTING SETTING

### PROJECT LOCATION

The Project Site consists of the existing Carson Civic Center located at 701 and 801 East Carson Street in the City of Carson. The Project Site includes six parcels (Assessor's Parcel Numbers [APNs] 7337-005-903, 7337-005-927, and 7337-006-919 through -922). The Project Site is bounded by single-family residential uses to the northeast; Desford Street to the northwest with single-family residential uses and the Carson Sheriff's Station across the street (approximately 60 feet from the Project Site); Avalon Boulevard to the west with a mobile home community, medical offices, urgent care, and a mixed-use development (retail and apartments) across the street (approximately 100 feet from the Project Site); Carson Street to the south with a mixed-use development (retail and senior apartments), a mobile home community, a child development center, a medical center, commercial retail, and a middle school across the street (approximately 100 feet from the Project Site; and a hotel, and offices to the east. Civic Plaza Drive is located along the eastern end of the Project Site, and Civic Center Drive traverse through the Project Site in a north-south direction.

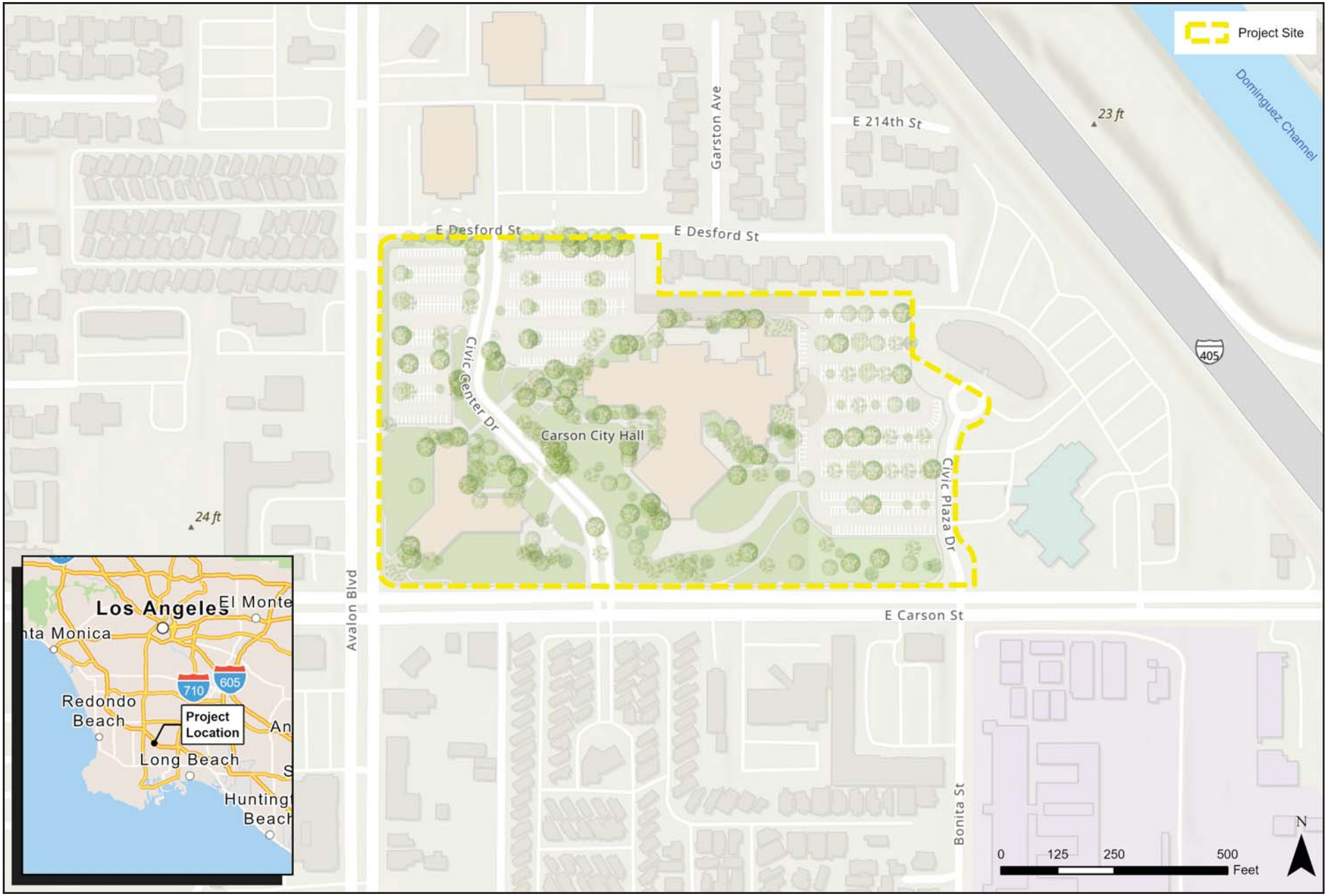
Interstate 405 (I-405) is approximately 920 feet from the Project Site. Direct access to the I-405 southbound and northbound lanes are provided along Carson Street via the I-405 on- and off-ramps. Interstate 110 (I-110) is approximately 1.4 miles west of the Project Site. Direct access to the I-110 southbound lanes is provided on Carson Street, while access to the northbound lanes is provided on 220$^{th}$ Street, south of Carson Street.

The location of the Project Site is shown in **Figure 2-1**.

### EXISTING SITE CONDITIONS

The Project Site currently has two structures (Carson City Hall and Carson Community/Event Center), several open space areas, and three surface parking lots. Carson City Hall is a two-story structure located at the southwestern corner of the Project Site. The Carson Community/Event Center is a one-story structure located in the center of the Project Site and includes meeting rooms, event space, and a stroke center.

Three surface parking lots are located on the Project Site. The surface parking lots are located in the northwestern, northern, and eastern portions of the Project Site. The surface parking lot at the northeastern portion of the Project Site is accessible via Civic Center Drive. The surface parking lot at the northern portion of the Project Site is accessible via Civic Center Drive and a driveway entrance on Desford Street. Civic Plaza Drive provides access to the surface parking lot in the eastern portion of the Project Site. Additionally, an east-west driveway within the northern end of the Project Site (facing the rear of the adjacent single-family residential properties) connects the northern and eastern parking lots. The three surface parking lots are shared by existing uses on the Project Site and the office building and hotel to the east of the Project Site.




Source: TAHA, 2025.



## Project Site and Regional Location

**Figure 2-1**

Civic Center Drive is a north-south street within the Project Site that connects Desford Street (north of the Project Site) with Carson Street (south of the Project Site). Civic Center Drive separates Carson City Hall from Carson Community/Event Center. Civic Center Drive is used by visitors and employees to access the on-site surface parking lots at the northwest and north sides of the Project Site and is also used by Carson Sheriff's vehicles to pass through the Project Site between Carson Street and the Carson Sheriff's Station surface parking lot on the north side of Desford Street. A sidewalk is provided along the east side of this street. A pedestrian bridge that connects City Hall to the Carson Community/Event Center crosses over Civic Center Drive.

Civic Plaza Drive is a north-south street within the eastern portion of the Project Site that connects Carson Street south of the Project Site with the surface parking lot on the eastern portion of the Project Site. The street provides access to the surface parking lots and uses within and adjacent to the Project Site. The southern portion of Civic Plaza Drive has sidewalks on both sides of the street that connects the sidewalk along Carson Street to the sidewalks on the southern end of the surface parking lots within and adjacent to the Project Site.

Landscaping is provided in the open space areas, around the perimeter of the Project Site, in the surface parking lots, and in the median along Civic Center Drive. Vegetation consists of ornamental grass, bushes, and trees. Adjacent to the Project Site, the parkway along Desford Street is landscaped with grass. Additionally, the sidewalks along Avalon Boulevard and Carson Street are lined with street trees.

Landscaped open space areas are located around Carson City Hall, to the west and east of Carson Community/Event Center, and along the southern portion of the Project Site facing Carson Street. These open space areas include walking paths with benches. A water fountain is located at the southwest corner of the Project Site.

Desford Street provides vehicular access to the Project Site via Civic Center Drive and a driveway entrance to the northern parking lot. Carson Street provides vehicular access to the Project Site via Civic Center Drive and Civic Plaza Drive. No vehicular access is available on Avalon Boulevard. Pedestrian access to the Project Site is provided via sidewalks along the north, west, and south sides of the Project Site on Desford Street, Avalon Boulevard, and Carson Street, respectively.

The Project Site is located in the Downtown Core. It is within the Downtown Mixed Use zoning district (DMX) and has a General Plan land use designation of Downtown Mixed Use (DMU).

**SURROUNDING AREA**

Existing uses in the immediate vicinity of the Project Site include the following:

- North: One- and two-story single-family residential uses, one-story Carson Sheriff's Station
- West: Mobile home community, one-story medical offices and urgent care, five-story mixed-use development (retail and apartments)
- South: Four-story mixed-use development (retail and senior apartments), mobile home community, child development center, two-story medical center, one-story commercial retail buildings, Andrew Carnegie Middle School with two-story buildings
- East: eight-story hotel, six-story office building

The United States Post Office, car dealerships, former auto repair businesses, and a vacant site are located further north of the Project Site. The vacant site was previously a mobile home community and is currently under construction for a future mixed-use development. A church, one- and two-story single-family residential uses, and mixed-use developments consisting of a mix of retail and multi-family residential uses are located further west. Commercial uses, single-family

residential uses, and Bonita Street Elementary School are located further south. Commercial uses, a plant nursery, I-405, and the Dominguez Channel are located further east of the Project Site.

The areas immediately adjacent to the Project Site, except for the single-family residential neighborhood to the north, mixed-use development to the west, and middle school to the south of the Project Site, are within the DMX zoning district. The residential neighborhood to the north is within the Low Density Residential (LDR) zoning district; the mixed-use development to the west is within the Union South Bay Specific Plan area, and the middle school to the south is within the Public School (PS) zoning district. Additionally, the mobile home communities to the west and south of the Project Site are within the Mobile Home Park Overlay Zone.

The areas immediately adjacent to the Project Site, except for the single-family residential neighborhood to the north, are in the Downtown Core and have a DMX General Plan land use designation. The residential neighborhood to the north has an LDR General Plan land use designation.

Regional mass transit service in the surrounding area is provided by Los Angeles County Metropolitan Transportation Authority (Metro) (Bus Line 246), Long Beach Transit (Bus Lines 2 and 4), and Torrance Transit (Bus Line 3). The bus stops are located at the Avalon Boulevard/Carson Street intersection.

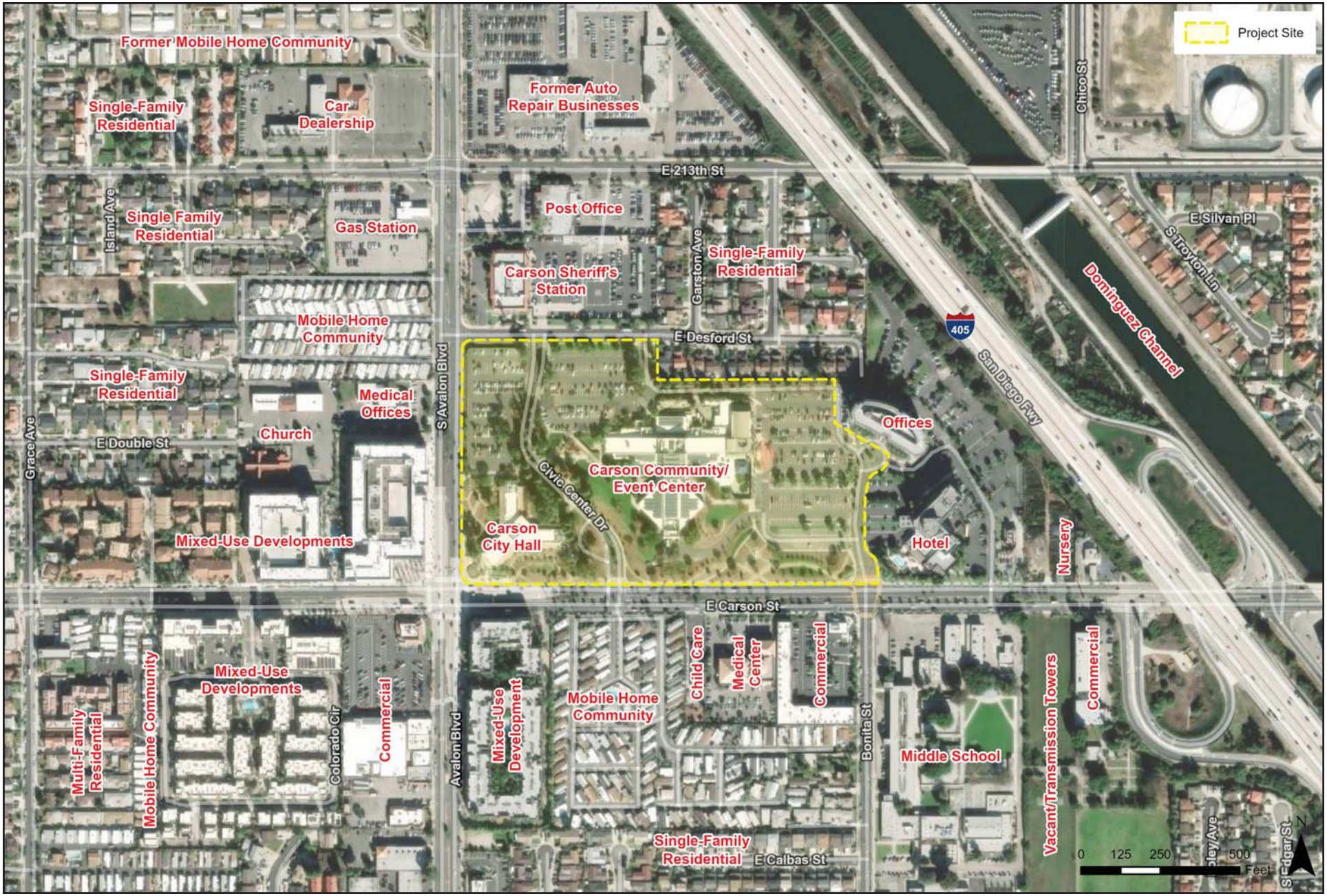
Carson Street is designated as a Class III (sharrows) bike route. No other bicycle facilities are provided in the surrounding area. Eight-foot-wide sidewalks are located along the north and south sides of Carson Street between Avalon Boulevard and Civic Plaza Drive.

An aerial photograph depicting the Project Site and the surrounding land uses is presented in **Figure 2-2**.

## 2.2 PROJECT DESCRIPTION FOR MODIFIED PROJECT

The Modified Project consists of the proposed Carson Civic Center Specific Plan, which identifies the types of development that are envisioned to occur on the Project Site and provides land use and development standards and design guidelines to guide future development on the 20-acre Project Site. Development for the Project Site, as envisioned by the proposed Specific Plan, include the renovation and repurposing of the existing City Hall building; the remodeling of the existing Carson Community/Event Center with improved amenities for events, additional class/program spaces, and an innovation center for teens; and the construction of a new City Hall building, a performing arts center, a mixed-use residential building, and a hotel. An elliptical plaza that could be designed as a jewel (referred to as Jewel Plaza) would be located between the existing City Hall building, the existing Community/Event Center, the proposed performing arts center, proposed mixed-use residential development, and proposed new City Hall building. The existing Civic Center Drive would be removed and replaced with a New Street that would continue to connect Desford Street to Carson Street. Additionally, an east-west pedestrian walkway would be constructed to connect Jewel Plaza to the proposed hotel.

For the purpose of identifying the location in which the types of development would occur within the Project Site and the development standards and design guidelines for each type of development, the proposed Specific Plan divides the Project Site into seven parcels. The seven parcels are identified in **Figure 2-3**.

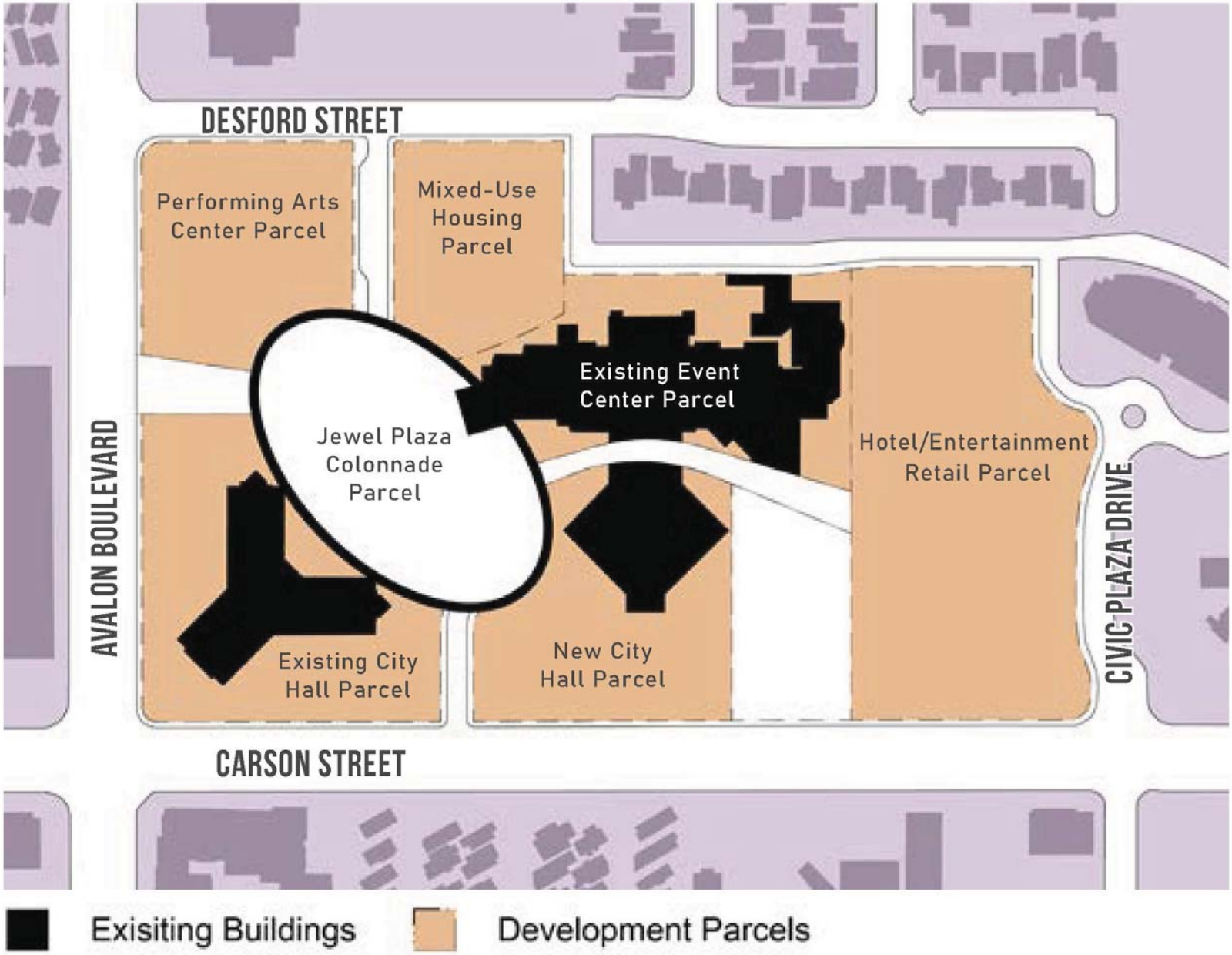



Source: TAHA, 2025.



## Surrounding Land Uses

**Figure 2-2**




Source: Gruen Associates, 2025.



**Development Parcels**
**Figure 2-3**

**Existing City Hall Parcel.** The existing 64,000-square-foot City Hall building would be located on the Existing City Hall Parcel. The existing City Hall, which was originally built in 1976, would be retained, renovated, and repurposed to potentially accommodate community services and a cultural resource center. The primary entrance to the existing City Hall building would be at the corner of the Carson Street/Avalon Boulevard intersection, with a second entrance facing the proposed Jewel Plaza. Passenger and service vehicle loading would be located along Avalon Boulevard.

Publicly accessible open space with new landscaping would be provided on the west and south sides of the parcel. The open space area on the south side of the parcel (southeast of the existing City Hall building) is proposed to be a garden that could potentially include sculptures, statues, and/or art pieces commemorating the Civil Rights Movement and its key figures.

The proposed Specific Plan would permit civic, retail/restaurant, and office uses, as well as subterranean parking on this parcel. Passenger loading would be provided on the west side of the parcel on Avalon Boulevard.

**Performing Arts Center Parcel.** The Performing Arts Center Parcel would be located at the northwestern portion of the Project Site and would be developed with an approximately 124,000-square-foot performing arts center. The performing arts center would contain a 2,000-seat main theater and a 150-seat black box theater. Approximately 5,000 square feet of retail/restaurant space is proposed on this parcel.

The proposed Specific Plan would include development standards that limit the height of buildings on this parcel to 10 stories, or up to 120 feet, with the maximum height generally concentrated along the southern, southeastern, and eastern ends of the parcel.

The main entrance to the performing arts center building would be at the southeast side of the building facing Jewel Plaza with a secondary entrance facing the New Street. Passenger loading is proposed on the east side of the parcel on the New Street, and service vehicle loading is proposed on the north side of the parcel on Desford Street. The proposed Specific Plan would allow subterranean parking to be constructed under this parcel.

**Mixed-Use Housing Parcel.** The Mixed-Use Housing Parcel would be located at the northern portion of the Project Site between the Performing Arts Center Parcel and the adjacent single-family residential properties to the northwest of the Project Site. A four-story 440,000-square-foot mixed-use housing development is proposed on this parcel. The mixed-use building would have approximately 10,000 square feet of retail and restaurant space on the first level; a four-level 240,000-square-foot podium parking structure that would accommodate up to 640 vehicles; and approximately 140,000 square feet of residential space with 140 residential units. The proposed development would be designed to have one or two courtyards. All residential units would face either a public street, public space, or the interior courtyard. A 6,000-square-foot bus depot is also proposed on the ground level. The podium parking structure would be situated above the bus depot and below the housing units. Retail and restaurant uses would be located along the west and southwest side of the proposed development facing the New Street and Jewel Plaza. The proposed Specific Plan would also permit underground parking on this parcel.

Structures on this parcel would be allowed to have a maximum height of up to 85 feet or 8 stories concentrated along the western, southwestern, and southern portion of the parcel, away from the adjacent residential properties to the north and east of the Project Site. The proposed Specific Plan would require a maximum height limit of up to 4 stories at the northern and eastern end of the parcel facing Desford Street and single-family residential uses, respectively. The proposed structure on the Mixed-Use Housing Parcel would be designed to step down towards the adjacent single-family residential properties to reduce the massing of the proposed structure at the adjacent residential neighborhood and to allow the proposed development to transition in height.

Primary access to this development would face Jewel Plaza, with a secondary access towards the west side of the parcel facing the New Street. Vehicles would primarily access the proposed parking structure on Desford Street, with a secondary entrance at the existing driveway on the east side of the parcel. Passenger loading would be located on the north side of the parcel at Desford Street, while service vehicle loading would be located on the west side of the parcel at the New Street.

**Existing Event Center Parcel.** The northern elongated portion of the existing Carson Community/Event Center would be located in the Existing Event Center Parcel. The southern diamond-shaped portion of this building would be located in the New City Hall Parcel (see discussion below). Under the Modified Project, the community/event center would be remodeled and divided into two sections. The northern, elongated portion would be separated from the southern diamond-shaped portion by a new pedestrian walkway that would be either open-to-sky or semi-covered. The northern section of this building would have educational and office spaces. A new tower element would be constructed at the western end of the long segment facing Jewel Plaza. Combined, the northern and southern portions of the remodeled Community/Event Center would be approximately 90,000 square feet in size. Uses permitted by the proposed Specific Plan include civic, retail/restaurant, office, assembly, and education.

The primary entrance for the existing Community/Event Center would be from Jewel Plaza, with a secondary entrance along the south side of the structure adjacent to the proposed east-west pedestrian walkway. Passenger and service vehicle loading would be provided on the north side of the parcel at the existing driveway. Another passenger loading area would be proposed at the New Street in Jewel Plaza. The Modified Plan would allow subterranean parking to be constructed in this parcel.

**New City Hall Parcel.** The New City Hall Parcel would be located south of the Existing Event Center Parcel. The southern diamond-shaped portion of the existing Carson Community/Event Center and a new City Hall would be located on this parcel. The diamond-shaped portion of the existing Community/Event Center would be remodeled to have a community hall and theater spaces. A new approximately 197,000-square-foot flagship City Hall would be developed and would amalgamate the existing Community/Event Center. The proposed new City Hall building may contain a centralized public lobby and “one-stop shop” permit counter, sustainable design elements, such as natural daylighting, low-energy systems, and green materials and flexible office space to accommodate evolving department needs and growth over time. Approximately 10,000 square feet of retail and restaurant space is proposed on this parcel. The building exterior may include pedestrian walkways, open space, and a plaza to encourage walkability and civic engagement.

A conical-shaped Council Chamber would be located on the west side of the parcel and would face the proposed Jewel Plaza. The rest of the building would be in the form of a curved vertical slab with its tallest massing at the western end of the building and stepping down towards the eastern end of the building. The proposed Specific Plan development standard would allow the new City Hall building to have a height of up to 200 feet, or 15 stories towards the western portion of the parcel. Building heights towards the eastern and northern ends of this parcel would be six and four stories, respectively.

The primary entrance to the new City Hall would be from Carson Street, with a secondary entrance facing Jewel Plaza. Passenger loading would be on the south side of the parcel at Carson Street, and service vehicle loading would be provided on the west side of the parcel at the New Street. The Modified Plan would allow subterranean parking to be constructed in this parcel.

**Hotel/Entertainment Retail Parcel.** An approximately 240,000-square-foot hotel with 140,000 square feet of podium parking would be constructed at the eastern end of the Project Site on the Hotel/Entertainment Retail Parcel. The proposed hotel would have approximately 420 rooms and an approximately 120,000-square-foot hotel amenity deck. The hotel would also have approximately 20,000 square feet of retail and restaurant space and 12,000 square feet of meeting

rooms. The amenity deck would be located at the northern portion of the parcel on top of the podium parking. The hotel amenity deck would have recreational, restaurant, and retail uses. On the ground level, retail uses would face the open space area to the west of the proposed hotel. Approximately 640 parking spaces are proposed in the podium parking structure. While subterranean parking is not proposed for the hotel development, the proposed Specific Plan would permit the development of underground parking on this parcel.

The proposed Specific Plan would include development standards that limit the height of the proposed hotel building to four stories within 100 feet of the northern end of the Hotel/Entertainment Retail Parcel to limit the scale and massing of the building from the adjacent residential properties and allow the proposed hotel building to transition in height. The maximum permitted height would be up to 240 feet, or 22 stories and would be concentrated towards the middle of the parcel, adjacent to the proposed east-west pedestrian walkway.

The primary entrance to the proposed hotel would be located on Carson Street, with a secondary entrance on the west side of the parcel where the proposed east-west pedestrian walkway terminates. Vehicles would enter the proposed parking structures via Carson Street and at the north end of the parcel. Passenger loading is proposed on Carson Street, while service vehicle loading is proposed on the west and east sides of the parcel.

The southwestern corner of the proposed hotel could potentially be developed with either open space (between the hotel building, the new City Hall building, and the existing Community/Event Center) or an approximately 25,000-square-foot interactive museum.

*Entertainment Retail Option*. In lieu of a hotel, the Modified Project provides an option to develop a 240,000-square-foot entertainment retail center on the Hotel/Entertainment Retail Parcel. Under this option, the Hotel/Entertainment Retail Parcel would be developed with 130,000 square feet of retail, 30,000 square feet of restaurant space, 30,000 square feet of interactive museum space, and 50,000 square feet of commercial space that is allocated for immersive entertainment for sports, arts, movies and other forms of entertainment. The Entertainment Retail Option would provide approximately 1,000 parking stalls in an above-grade podium parking structure and one level of subterranean parking garage.

Under this option, the proposed garden that would commemorate the Civil Rights Movement and its key figures with sculptures, statues, and/or art pieces would be located between the New City Hall Parcel and the Hotel/Entertainment Parcel instead of on the southeast side of the existing City Hall.

Building access locations and height limitations, as well as the development standards in the proposed Specific Plan, would remain the same as for the proposed hotel development.

**Jewel Plaza Colonnade Parcel.** An elliptical plaza shaped and designed like a jewel (Jewel Plaza) would be constructed at the Jewel Plaza Colonnade Parcel. The Performing Arts Center, Mixed-Use Housing, Existing Event Center, New City Hall, and Existing City Hall Parcels would surround the Jewel Plaza Colonnade Parcel. Jewel Plaza would be the focal point of the Project Site. The plaza would be defined by a colonnade that would be at least 14 feet from the floor to the ceiling and 19 feet to the top of the parapet. The roof of the colonnade would be flat and programmed to be either a running track or an area where visitors can access and look down into the plaza. Elevator and stair access to the roof of the colonnade would be located within any of the adjoining buildings.

In keeping with the City being known as “Jewel of the South Bay,” the central loop of the plaza would prominently display a jewel shape that is outlined by walkways and landscaping. Uses envisioned for Jewel Plaza include community events, concerts, recreation, fairs, and farmers’ markets. The proposed Specific Plan would allow for subterranean parking to be constructed under this parcel.

**Figure 2-4** presents the conceptual site plan of the Project Site with the development of the proposed hotel at the Hotel/Entertainment Retail Parcel. **Figures 2-5** and **2-6** depict a hypothetical rendition of what full build-out of the Project Site could potentially look like with the development of the proposed hotel and the optional interactive museum.

**Figure 2-7** presents the conceptual site plan of the Project Site with the development of the proposed entertainment retail center option at the Hotel/Entertainment Retail Parcel. **Figures 2-8** and **2-9** depict a hypothetical rendition of what full build-out of the Project Site could potentially look like with the development of the entertainment retail center.

### Open Space

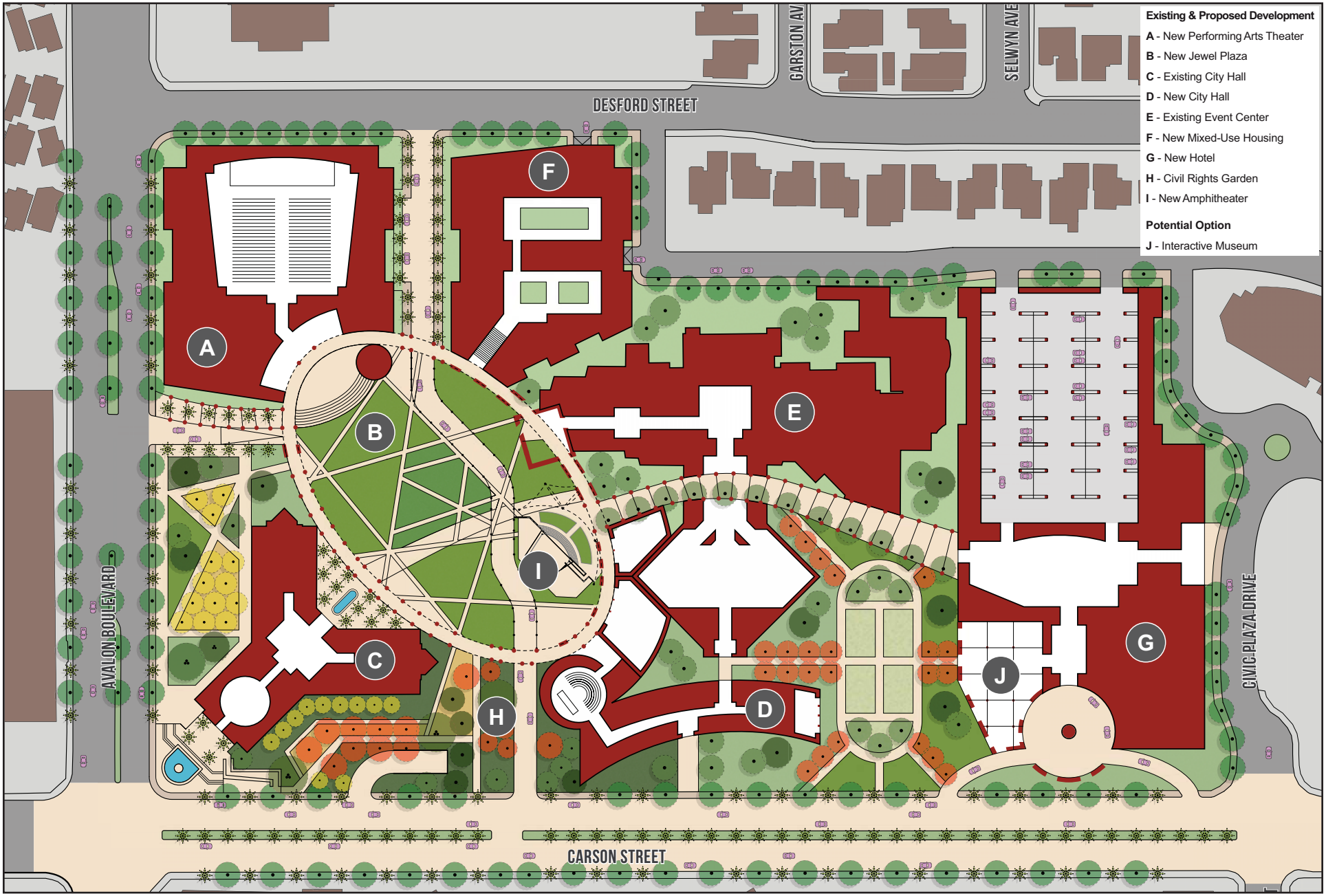
Open space areas would be provided in various areas of the Project Site and would consist of Jewel Plaza; landscaped open space areas around the existing City Hall building; landscaped open space area between the existing Community/Event Center, proposed new City Hall, and proposed hotel/entertainment retail center; landscaped open space area in front of the proposed new City Hall building; and courtyards within the mixed-use housing development. The open space areas throughout the Project Site, with the exception of the courtyards in the Mixed-Use Housing Parcel, would be publicly accessible. The courtyards in the Mixed-Use Housing Parcel would be specifically designed for the proposed residential uses. The proposed mixed-use housing development would have one or two courtyards.

The public open space network would be centered on Jewel Plaza, which would be the focal point of the Modified Project. Jewel Plaza would adjoin the northeast side of the existing City Hall, the southeast side of the proposed performance arts center, the southwest side of the proposed mixed-use residential development, the west side of the existing Community/Event Center, and the northwest side of the proposed City Hall.

The open space that is currently located around the existing City Hall building would be redesigned with new landscaping to maintain the visual prominence of the building from the Carson Street/Avalon Boulevard intersection. The intent of the open space is to mark the Project Site as a major destination. At the southeast side of the existing City Hall building, the open space area would be designed as a garden that may potentially include sculptures, statues, and/or art pieces commemorating the Civil Rights Movement and its key figures. Open space areas around the existing City Hall building would have pedestrian amenities, gathering spaces, and sitting areas. A landscaped open space area would also be provided in front of the proposed new City Hall building.

Landscaped open space with pedestrian pathways would also be placed between the New City Hall Parcel and Hotel/Entertainment Retail Parcel. The intent of this open space area is to provide outdoor use for the proposed new City Hall building, the existing Community/Event Center, and the proposed hotel. The function of this open space area could potentially include outdoor dining, small private and/or public events, photography for special occasions, and leisure. This open space area would not be provided if a museum is developed on the southwest side of the proposed hotel. Under the Entertainment Retail Option, this open space area would be designed as a garden commemorating the Civil Rights Movement and its key figures (see discussion below).

An east-west pedestrian walkway is proposed to connect Jewel Plaza to the Hotel/Entertainment Retail Parcel. This walkway would bisect the Community/Event Center and is intended to provide connectivity across the Project Site while providing various pedestrian amenities for sitting, eating, and gathering.




Source: Gruen Associates, 2025.



## Conceptual Site Plan with Hotel

**Figure 2-4**



Source: Gruen Associates, 2025.



## Conceptual Rendering with Hotel - View Looking Northeast

**Figure 2-5**

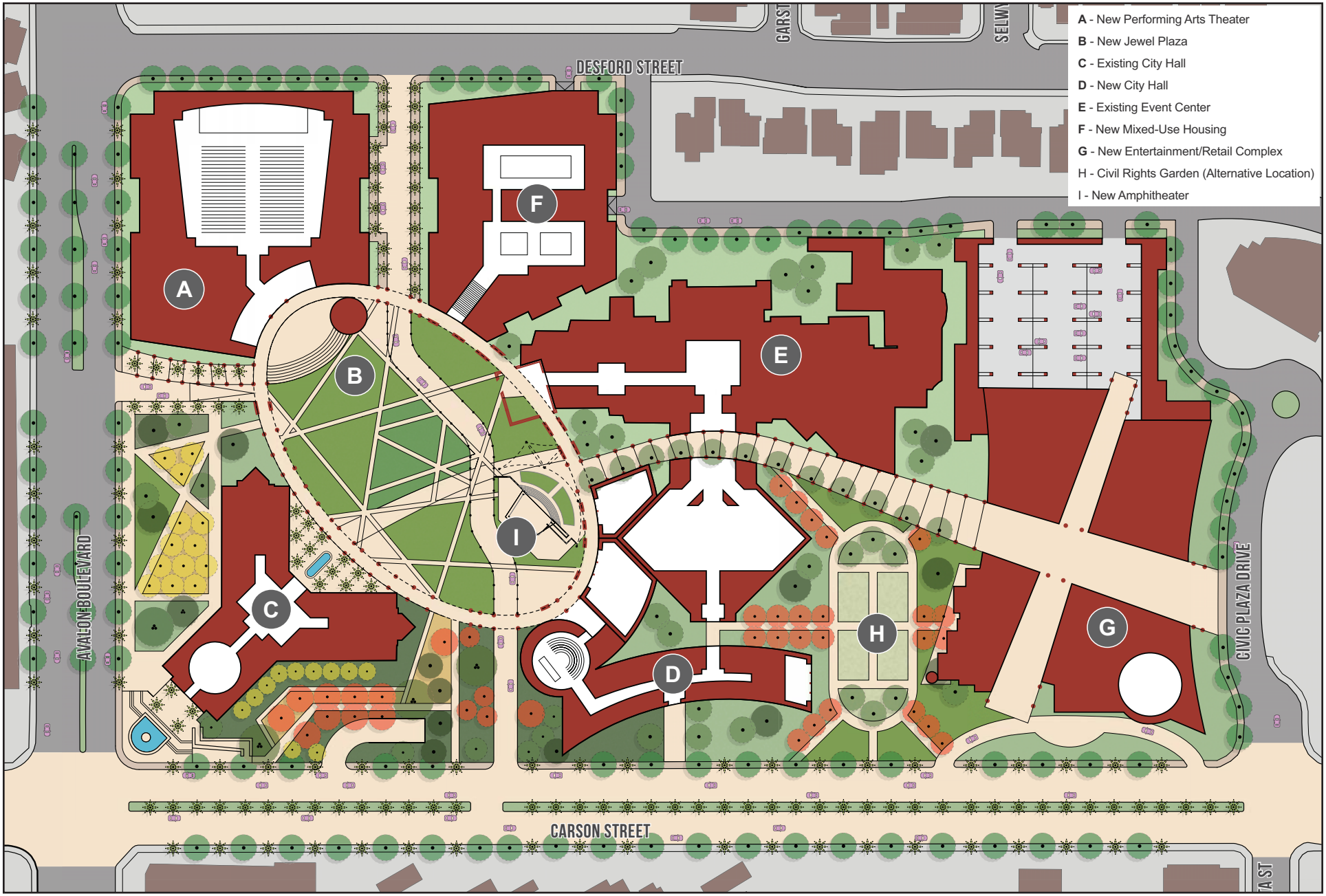



Source: Gruen Associates, 2025.



## Conceptual Rendering with Hotel - View Looking Northwest

**Figure 2-6**




Source: Gruen Associates, 2025.



## Conceptual Site Plan with Entertainment Retail Option

**Figure 2-7**



Source: Gruen Associates, 2025.

**Conceptual Site Plan with Entertainment Retail Option - View Looking Northeast**

**Figure 2-8**




Source: Gruen Associates, 2025.

## Conceptual Site Plan with Entertainment Retail Option - View Looking Northwest

**Figure 2-9**

Landscaping on the Project Site would conform to the California State Model Water Efficient Landscape Ordinance (MWELO), which promotes water-efficient irrigation, climate-appropriate planting, proper soil management, and landscape practices that minimize waste and support long-term sustainability. **Figure 2-10** presents the conceptual open space plan.

*Entertainment Retail Option*. Under the proposed Entertainment Retail Option, the garden that would potentially have sculptures, statues, and/or art pieces to commemorate the Civil Rights Movement and its key figures would be placed between the New City Hall Parcel and the Hotel Parcel instead of at the southeast side of the existing City Hall.

### Parking

Parking for the Modified Project would be provided in subterranean parking garages and above-ground podium parking structures. Limited surface parking that are primarily for handicapped and seniors would also be provided. The proposed Specific Plan would permit subterranean parking in the Existing City Hall, Performing Arts Center, Existing Community/Event Center, New City Hall, and Jewel Plaza Colonnade Parcels. Subterranean parking would be available for public use and would be shared among the development proposed in the Existing City Hall, Existing Event Center, New City Hall, and Performing Arts Center Parcels. Approximately 251,000 square feet of subterranean parking is proposed to accommodate approximately 670 subterranean parking spaces.

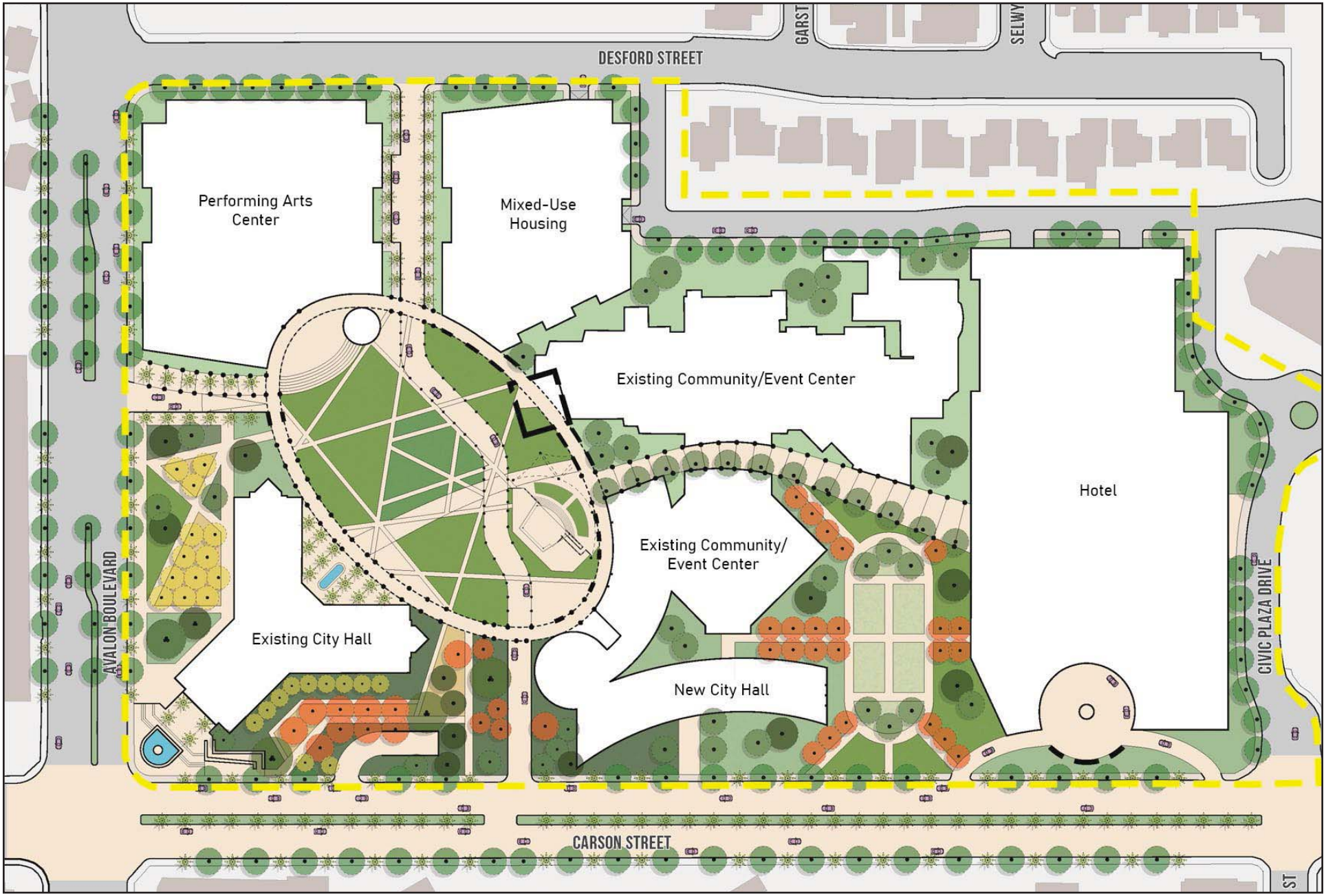
Above-grade podium parking structures are proposed to be developed in the Mixed-Use Housing and Hotel/Entertainment Retail Parcels. A total of approximately 1,280 parking spaces is proposed in the two podium parking structures, of which 640 spaces would be located in the Mixed-Use Housing Parcel and 640 spaces would be located in the Hotel/Entertainment Retail Parcel. In the Mixed-Use Housing Parcel, approximately 240,000 square feet of podium parking would be located above the proposed bus depot and below the proposed residential units. Podium parking on the Mixed-Use Housing Parcel would provide parking specifically for the development in the Mixed-Use Housing Parcel. In the Hotel/Entertainment Retail Parcel, approximately 140,000 square feet of podium parking would be located in the northern portion of the Hotel Parcel and would be placed below the hotel amenity deck. This parking structure would provide parking specifically for the development on the Hotel/Entertainment Retail Parcel.

*Entertainment Retail Option*. Under the Entertainment Retail Option, a podium parking structure and subterranean parking would be provided in the Hotel/Entertainment Retail Parcel to accommodate approximately 1,000 parking spaces that would be specifically allocated for the proposed entertainment retail development. The proposed subterranean parking garages and podium parking structure in the other parcels would be the same as described above.

### Pedestrian and Vehicular Circulation

The Modified Project would remove Civic Center Drive and replace it with a New Street. The existing pedestrian bridge over Civic Center Drive could potentially be removed or reconstructed. The New Street would continue to connect Desford Street to Carson Street and would pass through the proposed Jewel Plaza. Primary vehicular circulation to the Project Site, including emergency vehicles, would be from the New Street and Civic Plaza Drive. To the north and south of Jewel Plaza, both sides of the New Street would have 10-foot-wide sidewalks with street trees. The New Street would be approximately 26 feet wide. A portion of the street to the north of Jewel Plaza would be an additional 34 feet wide to accommodate a passenger loading area.

Civic Plaza Drive and the existing driveway at the northeastern portion of the Project Site (to the south and west sides of the adjacent single-family residential properties) would be retained for vehicular circulation around the Project Site. Civic Plaza Drive would potentially be widened by an additional 8 feet to accommodate a passenger loading area.




Source: Gruen Associates, 2025.



## Conceptual Landscape Plan

**Figure 2-10**

The Modified Project would potentially install one driveway on Avalon Boulevard, two driveways on Carson Street, and one driveway on Desford Street. Avalon Boulevard currently has no driveway entrances. The proposed new driveway entrance on Avalon Boulevard would be installed between the Existing City Hall Parcel and the Cultural Center Parcel and could potentially provide access to the proposed subterranean parking garage. The two new driveway entrances on Carson Street would be located on the south side of the Hotel/Entertainment Retail Parcel and would provide vehicular access to the passenger loading area for the proposed hotel. The Hotel/Entertainment Retail Parcel would have two additional driveway entrances on the north side of the parcel to provide access to the proposed podium parking structure on the parcel. On Desford Street, a new driveway entrance would be installed between the New Street and the existing northeastern driveway to provide vehicular access to the proposed podium parking structure in the Mixed-Use Housing Parcel. A driveway entrance to the proposed podium parking structure would also be provided at the existing northeastern driveway. At the southern end of the New Street, a new driveway entrance would be installed to provide access to the proposed subterranean parking garage.

Passenger loading areas are proposed at various locations throughout the Project Site, including on the east side of the Performing Arts Center Parcel (at Civic Center Drive), on the northeast side of the Existing City Hall Parcel, on the northwest side of the New City Hall Parcel, on the north side of the Existing Event Center Parcel, on the east side of the Hotel/Entertainment Retail Parcel (at Civic Plaza Drive), and on the south side of the Project Site (at Carson Street).

Pedestrian pathways would be located throughout the Project Site, including an east-west pedestrian walkway that extends from Jewel Plaza, passes through the existing Community/Event center, to the Hotel/Entertainment Retail Parcel. This pedestrian walkway would be the main east-west pedestrian walkway on the Project Site that connects the proposed uses on the west side of the Project Site to the east side of the Project Site. Additional pedestrian pathways would be provided southeast of the Community/Event Center to connect the east-west pedestrian walkway to Carson Street. Pedestrian pathways would also be provided to connect Jewel Plaza. Sidewalks would be constructed on both sides of the New Street and would provide pedestrian access too Jewel Plaza from street and Carson Avenue.

Adjacent to the Project Site, the number of travel lanes along Carson Street and Avalon Boulevard would remain unchanged. The section of Carson Street between Avalon Boulevard and Civic Plaza Drive would be improved with new paving. The sidewalk along the north side of Carson Street would be widened from 8 feet to 12 feet and would be enhanced with new landscaping and paving and/or art. Street trees would alternate between large shade trees and palm trees. This pattern of trees would also be replicated along the south side of the street. The sidewalk along the south side of Carson Avenue would continue to be 8 feet wide. New crosswalks are proposed at the Carson Street/Avalon Boulevard intersection. Additionally, a mid-block crossing would be provided near the front entry of the new City Hall building for pedestrian safety and mobility. The design of Carson Street would promote safe pedestrian paths and provide flexibility to close the street to host special events between Avalon Boulevard and Bonita Street/Civic Plaza Drive.

Bus shelters could potentially be installed at bus stops adjacent to and across the street from the Project Site along Carson Street and Avalon Boulevard.

**Land Use and Development Standards**

The Modified Plan would include land use and development standards and design guidelines that would guide the development of the 20-acre Project Site and would supplement other applicable regulations in the City's Zoning Code. If the Modified Project is adopted by the City, the proposed Specific Plan would be the regulatory and land use policy document for the Project Site. Any situation not specifically addressed by the proposed Specific Plan would be subject to the

requirements of the Carson Municipal Code (CMC), provided that such regulations are not in conflict with the objectives of the proposed Specific Plan.

**Table 2-1** provides a summary of the proposed uses to be developed, and **Table 2-2** summarizes the proposed development standards for the Specific Plan.

**TABLE 2-1: CARSON CIVIC CENTER SPECIFIC PLAN DEVELOPMENT SUMMARY**

| **Proposed Uses** | **Size** |
|---|---|
| Total Parcel Area | 20 acres |
| **Existing City Hall Parcel** | **64,000 building sf** |
| Community Services | |
| Cultural Resource Center | |
| Subterranean Parking | |
| **Performing Arts Center Parcel** | **124,000 sf** |
| Main Theater | 2,000 seats |
| Black Box Theater | 150 seats |
| Retail | 5,000 sf |
| Subterranean Parking | |
| **Mixed Use Housing Parcel** | **440,000 sf** |
| Retail/restaurant | 10,000 sf |
| Residential | 130,000 sf, 140 units |
| Bus Depot (first level) | 60,000 sf |
| Podium Parking (above bus depot, below housing) | 240,000 sf, 640 spaces |
| **Existing Event Center Parcel** | **90,000 building sf** |
| Community Center (existing) | |
| Event Center (existing) | |
| Subterranean Parking | |
| **New City Hall Parcel** | **197,000 building sf** |
| City Hall Offices, Lease Office Space | 187,000 sf |
| Retail/Restaurant | 10,000 sf |
| Subterranean Parking Structure | |
| **Hotel/Entertainment Retail Parcel** | |
| Hotel Development | 380,000 building sf |
| Hotel | 208,000 sf, 420 rooms |
| Retail/Restaurant | 20,000 sf |
| Hotel Amenity Deck | 120,000 sf (not included in total hotel building sf) |
| Meeting Rooms | 12,000 sf |
| Interactive Museum (optional) | 25,000 sf (not included in total hotel building sf) |
| Podium Parking (below hotel amenity deck) | 140,000 sf, 640 spaces |
| Entertainment Retail Option | 240,000 building sf |
| Retail | 130,000 sf |
| Restaurant | 30,000 sf |
| Interactive Museum | 30,000 sf |
| Immersive Entertainment Venue | 50,000 sf |
| Podium Parking plus 1 level Subterranean Parking | 1,000 spaces |
| **Total Parking Spaces** | **631,000 sf, 1,950 spaces** |
| Subterranean Parking (to be shared between Existing City Hall, Existing Community/Event Center, New City Hall, and New Cultural Center Parcels) | 251,000 sf, 670 spaces |
| Podium Parking (Mixed-Use Housing Parcel and New Hotel Parcel) | 380,000 sf, 1,280 spaces |

sf = square feet
**SOURCE**: Gruen Associates, 2025.

| TABLE 2-2: CARSON CIVIC CENTER SPECIFIC PLAN DEVELOPMENT STANDARDS | |
|---|---|
| **Parcel** | **Development Standard** |
| **BUILDING SETBACK FROM STREET OR ADJACENT PROPERTIES** | |
| Existing City Hall Parcel | • n/a |
| Performing Arts Center Parcel | • 5 feet minimum, 10 feet maximum from Avalon Blvd, Desford St, and New St<br>• 5 feet maximum from southern parcel line<br>• 0 feet from southeastern parcel line |
| Mixed-Use Housing Parcel | • 5 feet minimum, 10 feet maximum from New St, Desford St, and southeastern parcel line<br>• 10 feet minimum and maximum from eastern parcel line<br>• 20 feet minimum step-back above 4 stories from eastern parcel line facing adjacent residential properties |
| Existing Event Center Parcel | • n/a |
| New City Hall Parcel | • 10 feet minimum from Carson St<br>• 5 feet minimum from New St and Civic Plaza Dr |
| Hotel/Entertainment Retail Parcel | • 30 feet maximum from Carson St<br>• 5 feet minimum from Civic Plaza Dr<br>• 20 feet setback from northern parcel line |
| Jewel Plaza Colonnade Parcel | • n/a |
| **BUILDING ACCESS** | |
| Existing City Hall Parcel | Primary Access:<br>• New St from Carson St and parking ramp along northern parcel line from Avalon Blvd (vehicles)<br>• Carson St/Avalon Blvd intersection (pedestrians)<br>Secondary Access:<br>• Jewel Plaza (pedestrians)<br>Loading Area:<br>• Avalon Blvd (passengers and service vehicles) |
| Performing Arts Center Parcel | Primary Access:<br>• Avalon Blvd (vehicles)<br>• Jewel Plaza (pedestrians)<br>Secondary Access:<br>• New St (vehicles and pedestrians)<br>Loading Area:<br>• New St (passengers)<br>• Desford St (service vehicles) |
| Mixed-Use Housing Parcel | Primary Access:<br>• Desford St (vehicles)<br>• Jewel Plaza (pedestrians)<br>Secondary Access:<br>• Eastern Driveway (vehicles)<br>• New St (pedestrians)<br>Loading Area:<br>• New St (passengers)<br>• Desford St (service vehicles) |

| TABLE 2-2: CARSON CIVIC CENTER SPECIFIC PLAN DEVELOPMENT STANDARDS | |
|---|---|
| **Parcel** | **Development Standard** |
| Existing Event Center Parcel | Primary Access:<br>• Northern parcel line (vehicles)<br>• Jewel Plaza (pedestrians)<br>Secondary Access:<br>• East-west pedestrian walkway (pedestrians)<br>Loading Area:<br>• New St (passengers)<br>• Northern parcel line (passengers and service vehicles) |
| New City Hall Parcel | Primary Access:<br>• Carson St (vehicles and pedestrians)<br>Secondary Access:<br>• Jewel Plaza (pedestrians)<br>Loading Area:<br>• Carson St (passengers)<br>• New St (service vehicles) |
| Hotel//Entertainment Retail Parcel | Primary Access:<br>• Carson St (vehicles and pedestrians)<br>Secondary Access:<br>• Northern parcel line (vehicles)<br>• Western parcel line next to east-west pedestrian walkway (pedestrians)<br>Loading Area:<br>• Carson St (passengers)<br>• Western and eastern property line (service vehicles) |
| Jewel Plaza Colonnade Parcel | Primary Access:<br>• Carson St (vehicles & pedestrians)<br>Secondary Access:<br>• Avalon Blvd (vehicles & pedestrians)<br>Loading Area:<br>• n/a |
| **OPEN SPACE (PUBLICLY ACCESSIBLE)** | |
| Existing City Hall Parcel | • Minimum of 1 fronting Carson St<br>• Minimum of 1 fronting Avalon Blvd<br>• 30 feet by 30 feet (minimum dimensions) |
| Performing Arts Center Parcel | • n/a |
| Mixed-Use Housing Parcel | • n/a |
| Existing Event Center Parcel | • n/a |
| New City Hall Parcel | • Minimum of 1 fronting Carson St<br>• 25 feet by 50 feet or equal area (minimum dimension): |
| Hotel//Entertainment Retail Parcel | • n/a |
| Jewel Plaza Colonnade Parcel | • Roof level of Colonnade to be publicly accessible<br>• 15 feet wide (minimum) |
| **BUILDING HEIGHT LIMITS** | |
| Existing City Hall Parcel | • n/a |
| Performing Arts Center Parcel | • 120 feet or 10 stories (maximum)<br>• Maximum height to be concentrated along southern, southeastern, and eastern parcel lines |

| TABLE 2-2: CARSON CIVIC CENTER SPECIFIC PLAN DEVELOPMENT STANDARDS | |
|---|---|
| **Parcel** | **Development Standard** |
| Mixed-Use Housing Parcel | • 85 feet or 8 stories (maximum) to be concentrated along western, southwestern, and southeastern parcel line<br>• 4 stories (maximum) along northern parcel line (facing Desford St) and eastern parcel line (facing single-family residential properties)<br>• Minimum step-back of 20 feet from southeastern and eastern parcel lines if above 4 stories in height |
| Existing Event Center Parcel | • n/a |
| New City Hall Parcel | • 200 feet or 15 stories (maximum)<br>• Maximum height to be concentrated near Civic Center Dr/Carson St intersection<br>• Minimum 20 feet step-back from eastern and northern parcel lines; maximum 6 stories at step-back from eastern parcel line and 4 stories at step-back from northern parcel line |
| Hotel/Entertainment Retail Parcel | • 240 feet or 22 stories (maximum) to be concentrated towards the middle of the parcel adjacent to the east-west pedestrian walkway<br>• 4 stories within 100 feet from northern parcel line |
| Jewel Plaza Colonnade Parcel | • 14 feet floor to ceiling, 19 feet to top of parapet (minimum)<br>• No maximum height limit |
| **PERMITTED USES** | |
| Existing City Hall Parcel | Civic, Retail/Restaurant, Office, Amenities to support active ground floor uses (include at least two of the following: seating, art, vendors, activities [e.g., chess tables], and kiosks) |
| Performing Arts Center Parcel | Civic, Retail/Restaurant, Assembly |
| Existing Event Center Parcel | Civic, Retail/Restaurant, Office, Assembly, Education |
| Mixed-Use Housing Parcel | Residential, Retail/Restaurant, Active Ground Floor Uses and Amenities, Parking |
| New City Hall Parcel | Civic, Retail/Restaurant, Office, Amenities to support active ground floor uses (including at least two of the following: seating, art, vendors, activities [e.g., chess tables], and kiosks) |
| Hotel/Entertainment Retail Parcel | Retail/Restaurant, Hospitality, Entertainment |
| Jewel Plaza Colonnade Parcel | Civic, Open Space, Amenities to support active ground floor and rooftop uses (include at least two of the following: seating, art, vendors, activities [e.g., chess tables], and kiosks) |
| **Parking** | |
| Existing City Hall Parcel | <u>Permitted:</u><br>• Surface Parking for Handicapped & Seniors<br>• Underground Parking<br><u>Not Permitted:</u><br>• Podium Parking<br>• Within 20 feet of southern parcel lines facing Carson St and Avalon Blvd |
| Performing Arts Center Parcel | <u>Permitted:</u><br>• Surface Parking for Handicapped & Seniors<br>• Underground Parking<br><u>Not Permitted:</u><br>• Podium Parking<br>• Within 20 feet of eastern parcel line facing Avalon Blvd |

**TABLE 2-2: CARSON CIVIC CENTER SPECIFIC PLAN DEVELOPMENT STANDARDS**

| Parcel | Development Standard |
|---|---|
| Mixed-Use Housing Parcel | Permitted:<br>• Surface Parking for Handicapped & Seniors<br>• Podium Parking<br>• Underground Parking<br>Not Permitted:<br>• n/a |
| Existing Event Center Parcel | Permitted:<br>• Surface Parking for Handicapped & Seniors<br>• Underground Parking<br>Not Permitted:<br>• Podium Parking |
| New City Hall Parcel | Permitted:<br>• Surface Parking for Handicapped & Seniors<br>• Underground Parking<br>Not Permitted:<br>• Podium Parking<br>• Within 20 feet of southern parcel line facing Carson St |
| Hotel/Entertainment Retail Parcel | Permitted:<br>• Surface Parking for Handicapped, Seniors, and pick-up/drop-off<br>• Podium Parking<br>• Underground Parking<br>Not Permitted:<br>• Within 20 feet of southern parcel line facing Carson St |
| Jewel Plaza Colonnade Parcel | n/a |

**SOURCE:** Gruen Associates, 2025; TAHA, 2025

# 3.0 ENVIRONMENTAL IMPACT ANALYSIS

This section provides an impact assessment of the Modified Project. The information below addresses each of the environmental issues that were previously analyzed within the scope of the previously adopted EIR for the General Plan Update and the most current Appendix G of the CEQA Guidelines. The conclusions of the Certified EIR are provided as a reference for each environmental issue area for purpose of describing how the proposed changes would not result in any new significant impacts and would not increase the severity of the significant impacts identified in the Certified EIR.

The CEQA Guidelines Environmental Checklist Form was used to compare the anticipated environmental effects of the Modified Project with those disclosed in the Certified EIR and to review whether any of the conditions set forth in CEQA Guidelines Section 15162 and PRC Section 21166, requiring preparation of a Supplemental or Subsequent EIR, have been triggered.

The checklist and evaluation below provide the following information for each of these environmental impact categories:

1. **IMPACT DETERMINATION IN THE CERTIFIED EIR**: This section lists the impact determination made in the Certified EIR for each environmental topic area. It also lists the General Plan Update policies that are applicable to each environmental topic area.

2. **DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?** Pursuant to CEQA Guidelines Section 15162(a)(1), this section indicates whether the Modified Project would result in new significant impacts that have not already been considered and mitigated by the prior environmental review or would result in a substantial increase in the severity of a previously identified impact.

3. **ANY NEW CIRCUMSTANCES INVOLVING NEW IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?** Pursuant to CEQA Guidelines Section 15162(a)(2), this section indicates whether there have been changes to the Project Site or the vicinity (circumstances under which the project is undertaken) that have occurred subsequent to the prior environmental document, which would result in the Modified Project having new significant environmental impacts that were not considered in the prior environmental document or that substantially increase the severity of a previously identified impact.

4. **ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?** Pursuant to CEQA Guidelines Section 15162(a)(3)(A) through (D), this section indicates whether new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental documents were certified as complete is available, requiring an update to the analysis of the previous environmental document to verify that the environmental conclusions and mitigations remain valid. If the new information shows the following, then the question would be answered “Yes”, requiring the preparation of a Supplemental or Subsequent EIR:

   (A) The project will have one or more significant effects not discussed in the prior environmental documents;

   (B) Significant effects previously examined will be substantially more severe than shown in the prior environmental documents;

(C) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

(D) Mitigation measures or alternatives which are considerably different from those analyzed in the prior environmental documents would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

However, if the additional analysis completed as part of this environmental review finds that the conclusions of the prior environmental document remain unchanged and no new significant impacts are identified, or identified environmental impacts are not found to be more severe, or there are no additional mitigation measures or alternatives now available or feasible but declined for adoption by the project proponent, then the question would be answered ”No” and no Supplemental or Subsequent EIR is required.

**5.** **MITIGATION MEASURES ADDRESSING IMPACTS**: Pursuant to CEQA Guidelines Section 15162(a)(3), this section indicates whether prior environmental document provides mitigation measures to address effects in the related impact category. If so, a “Yes” response will be provided. In some cases, the previously adopted mitigation measures have already been implemented or are not applicable to the Modified Project, or a significant impact was not identified and mitigation was not required. In either instance, a “No” response will be indicated.

**6.** **CONCLUSION**: For each environmental topic area, a discussion of the conclusion relating to the analysis is provided.

# 3.1 AESTHETICS

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **AESTHETICS**. Except as provided in Public Resources Code Section 21099, Would the project: | | | | | |
| (a) Have a substantial adverse effect on a scenic vista? | Less Than Significant | No | No | No | No |
| (b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | No Impact | No | No | No | No |
| (c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | Less Than Significant | No | No | No | No |
| (d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | Less Than Significant | No | No | No | No |

## 3.1.1 IMPACT DETERMINATION IN THE CERTIFED EIR

### *(a) Would the Project have a substantial adverse effect on a scenic vista?*

The Certified EIR concluded that the General Plan Update introduces land use changes throughout the Planning Area, which includes the City and portions of the unincorporated County located to the north (between Alondra Boulevard and Redondo Beach Boulevard) and northeast (north of Del Amo Boulevard and east of Wilmington Avenue) of the City boundaries. The unincorporated County areas that are part of the Planning Area is within the City's sphere of influence (SOI), which is defined in the Certified EIR as the ultimate physical boundary and service area of the City and encompasses territory that is envisioned to be the City's ultimate service area that could potentially be annexed into City limits. In most cases, the parcels with land use changes are located in or near already developed areas and coincide with areas designated for development under the existing General Plan. By focusing development in infill areas, the General Plan Update relieved pressure to develop in open space and natural areas while filling visual gaps in existing neighborhoods, which allows for the preservation of open space views and the enhancement of urban views. The Planning Area is mainly characterized by urban environments, and as a result, scenic vistas are mostly limited to open space, vacant natural areas, and parks. The General Plan Update includes several policies pertaining to preserving these resources and their scenic qualities. Policies include context-specific design of new development and promoting infill development within the City's central core. Individual development projects would still be subject to development and planning review and, therefore, must conform to zoning and other ordinances regarding aesthetic qualities such as lighting, signage, landscaping, and building setbacks. Due to the focus on infill development in the General Plan Update and policies that ensure new development will have minimal effects on open

spaces and other scenic resources, the impact of the General Plan Update on the City's scenic vistas was found to be less than significant.

***(b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

The Certified EIR concluded that no adopted or eligible state scenic highway is located in the City. Given that no adopted or eligible state scenic highways are located within the Planning Area and that polices of the General Plan Update would ensure new development would have minimal effects on open spaces and other scenic resources, no impact would occur.

***(c) In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

Zoning and other regulations governing scenic quality applicable to the City include CMC provisions relating to development review and subdivision design. Policies in the General Plan Update are intended to complement and further the intent of these provisions regulating scenic quality and resources and design guidelines, and any development within the City that occur under the General Plan Update would be subject to regulations in CMC. For these reasons, the Certified EIR concluded that the impact of the General Plan Update on scenic quality within the City would be less than significant.

The General Plan Update does not anticipate significant land use changes within the unincorporated SOI. Rather, land use designations reflect existing uses and are generally intended to provide consistency with the General Plan Update in the event that land within the SOI is annexed into City limits. In addition, the Los Angeles County General Plan and Code of Ordinances contain provisions that would protect any scenic resources. The General Plan Update would, therefore, not substantially degrade the existing visual character or quality of public views of the SOI and its surroundings and, thus, the impact of the General Plan Update on scenic quality within the SOI was found to be less than significant.

***(d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

The Certified EIR concluded that new development resulting from implementation of the General Plan Update would necessitate the use of additional light fixtures and would contribute to existing conditions of light and glare. New light sources may include residential and non-residential interior and exterior lighting, parking lot lighting, commercial signage lighting, and lamps for streetscape and public recreational areas. Most new development resulting from the General Plan Update would take place in or near developed and urbanized areas where moderate light and glare already exist and would not be out of character with the urban environment. The General Plan Update includes policies related to buffering between development and sensitive habitats, and between new development and existing uses. Finally, the CMC contains provisions that would limit light and glare for new non-residential and residential development. With these measures in place, the impact of the General Plan Update with respect to light and glare was found to be less than significant.

## General Plan Update Policies that Address Aesthetics

### *Land Use and Revitalization*

*Guiding Policies*

LUR-G-5 Provide opportunities for new residential development in a variety of settings, including through infill and redevelopment, without impacting existing neighborhoods or creating conflicts with industrial operations, while conserving mobile homes as much as possible, which provide more affordable housing.

LUR-G-7 Develop Carson's Central Core—extending approximately 1.7 miles both east-west along West Carson Street and north-south along Avalon Boulevard and including the South Bay Pavilion—into a vibrant, pedestrian-oriented mixed-use hub of the community, with housing, retail, and other commercial uses, and civic uses and community gathering spaces.

*Implementing Policies*

LUR-P-18 Promote infill mixed-use development in either a vertical or horizontal configuration when aging shopping centers are redeveloped to create mixed-use corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.

LUR-P-20 Require outdoor storage associated with use/building/business to be screened from any public view, including from adjacent streets as well as residential and commercial uses.

LUR-P-22 When industrial land directly adjacent to existing or permitted residential, parks, schools or other sensitive uses is developed or intensified, require a buffer of natural vegetation, open space, berms, and trees between the new residential development and industrial land. Other operation factors, including hours of operation, traffic, noise, and air quality impacts, shall be assessed and mitigated at time of project review

Details of this would need to be developed as part of the Zoning Code. The buffer can help ameliorate visual impacts, and prevent reduce impacts related to light and glare, and potentially noise and air quality.

### *Community Character, Identity, and Design*

*Implementing Policies*

CCD-P-8 Require buildings to provide a "front face" along Greenway Corridors by locating entryways, storefronts, and windows facing the street while locating elements like blank walls, parking lots, and storage areas away from the corridors.

CCD-P-21 Support an urban, walkable environment by incorporating the following strategies:

a) Combine residential, commercial, and, when feasible, industrial uses as connected and integrated components of the district, rather than standalone uses.

b) Consolidate parking into shared underground garages or structures to discourage large parking lots surrounding buildings.

c) Present a cohesive face along public streets, rather than development being introverted.

d) Ensure that building entrances and lobbies are visible and accessible from streets.

e) Locate any industrial areas, parking lots, loading areas, and similar uses away from residential areas, streets, and pedestrianized areas.

CCD-P-28 Support an improved public realm for new residential and commercial development along East Carson Street by having a strong building to street interface, without requiring active frontages. Limit fences, blank walls, loading docks, and parking lots fronting Carson Street.

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-1 Maintain a balanced and integrated open space system reflecting a variety of considerations—resource conservation, production of resources, recreation, and aesthetic and community identity—and ensuring synergies between various open space components and compatibility with land use planning.

OSEC-G-2 Seek opportunities for the restoration of natural open space during redevelopment of industrial or remediated landfills—including land currently used to produce resources—to create open space that supports outdoor recreation, protects public health and safety, and improves plant and animal habitat.

OSEC-G-3 Support efforts to improve the biodiversity of plant and animal habitats within Carson by creating natural habitat areas when feasible. Support efforts to restore channelized creeks to naturalized flows, with supportive open space development that promotes healthy riparian habitat.

OSEC-G-4 Recognize and support the preservation of wildlife migration routes and special status species that are state or federally listed as Endangered, Threatened, or Rare.

OSEC-G-5 Promote ecology and avian habitat creation by supporting a strong urban forest.

*Implementing Policies*

OSEC-P-4 Support reclamation of natural habitat in heavily disturbed locations, including closed landfills, channels, and when industrial areas are redeveloped, to improve the biodiversity of the City, increase resident's access to nature and outdoor recreation, restore plant and animal habitat, and assist with environmental remediation.

OSEC-P-5 Recognize the importance of the urban forest to the natural environment in Carson and support the expansion of the tree canopy on public and private property throughout the community. Undertake a program to increase Carson's "urban forest", with emphasis on planting street trees along Greenway Corridors and Boulevards, in mixed-use areas with greater concentration of pedestrians, and adjacent or close to freeways and along arterials with high truck traffic.

OSEC-P-6 Enhance tree health and the appearance of streets and other public spaces through regular maintenance as well as tree and landscape planting and care of the existing canopy.

OSEC-P-7 Provide ongoing education for property owners, businesses, and developers regarding landscape, maintenance and irrigation practices that promote habitat creation for wildlife species and improving the urban forest.

***Land Use and Revitalization***

*Implementing Policies*

LUR-P-22 When industrial land directly adjacent to existing or permitted residential, parks, schools or other sensitive uses is developed or intensified, require a buffer of natural vegetation, open space, berms, and trees between the new residential development and industrial land. Other operation factors, including hours of operation, traffic, noise, and air quality impacts, shall be assessed and mitigated at time of project review.

**Mitigation Measures**

None required.

### 3.1.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

#### *(a) Would the Project have a substantial adverse effect on a scenic vista?*

A significant impact would occur if the Modified Project would obstruct or detract from a scenic vista. A scenic vista is defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public.[1] Public views are those that are experienced from a publicly accessible vantage point, such as a roadway or public park.

The Project Site is located in an urban environment in the City of Carson. Although the Project Site varies in elevation, its surrounding area is relatively flat. No scenic vistas are available on the Project Site or in the surrounding area. Intervening buildings and trees generally obstruct views on the Project Site and within the surrounding area. The proposed project would construct structures that range from 10 stories (120 feet) to up to 22 stories (240 feet) in height. Although future structures on the Project Site would be taller than the structures in the surrounding area, the taller structures are not expected to obstruct any scenic vistas since none are available on the Project Site and its surrounding area. Intervening structures and trees would continue to limit views in the surrounding area. Therefore, the Modified Project would not have a substantial adverse effect on scenic vistas, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

Under the Entertainment Retail Option, the height limit for the Hotel/Entertainment Retail Parcel would be the same as the Modified Project and, thus, the Entertainment Retail Option would result

[1]Obstruction of private views is not generally regarded as a potential significant environmental impact under CEQA. (See *Citizens for Responsible and Open Government v. City of Grand Terrace* [2008] 160 Cal.App.4th 1323, 1337-38; *Mira Mar Mobile Community v. City of Oceanside* [2004] 119 Cal.App.4th 477, 492-93). CEQA case law has established that protection of public views is the appropriate EIR analysis. For example, in Association for Protection etc. Values v. City of Ukiah (1991) 2 Cal. App. 4th 720 [3 Cal. Rptr.2d 488], the Court held that, "we must differentiate between adverse impacts upon particular persons and adverse impacts upon the environment of persons in general." As recognized by the court in *Topanga Beach Renters Assn. v. Department of General Services* (1976) 58 Cal.App.3d 188 [129 Cal.Rptr. 739]: '[A]ll government activity has some direct or indirect adverse effect on some persons. The issue is not whether [the project] will adversely affect particular persons but whether [the project] will adversely affect the environment of persons in general.'"

in similar impacts as the hotel under the Modified Project. No new or increased significant impacts beyond those identified in the Certified EIR would occur.

***(b) Would the Project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

The Project Site is not located along or within the vicinity of a scenic highway. The nearest state-designated scenic highway is State Route 91 east of State Route 55, approximately 25 miles east of the Project Site. The nearest eligible scenic highway is Pacific Coast Highway south of the Los Alamitos Traffic Circle, approximately 7.4 miles southeast of the Project Site.[2] The Project Site is not within the viewshed of these state-designated and eligible scenic highways. The Project Site does not contain any rock outcroppings, historic buildings, or scenic trees. Therefore, the Modified Project would not substantially damage scenic resources within a state scenic highway, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would not substantially damage scenic resources within a state scenic highway since the Project Site is not located along or within the vicinity of a scenic highway. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) In non-urbanized areas, would the Project substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

The Project Site is located in an urbanized area, and a significant impact would occur if the proposed project conflicts with applicable zoning and other regulations governing scenic quality. The Project Site is located in the Downtown Core and has DMX zoning and DMU General Plan land use designations.

The Modified Project would change the zoning of the Project Site to Specific Plan (SP). If the proposed project is approved by the City, the proposed Specific Plan would constitute the zoning and General Plan land use designation for the Project Site, and the design and architecture of the structures on the Project Site would be controlled by the provisions of the proposed Specific Plan. The design and architecture of future structures on the Project Site would be required to be consistent with the development standards and design guidelines of the Specific Plan. In accordance with Section 9217.2 of the City's Zoning Code, if the Modified Project is approved, the regulations and standards in the proposed Specific Plan would supersede the requirements of the City's Zoning Code. Any issues that the proposed Specific Plan does not specifically address would be subject to the requirements of the City's Zoning Code. The Modified Project has been designed to be compatible with the adjacent single-family residential uses, as well as the surrounding area.

The Modified Project would be required to comply with the applicable General Plan Update policies listed above, and City regulations governing scenic quality. One of the land use strategies identified in the General Plan Update is to focus most new development in the Downtown Core. Additionally, the DMU land use designation is intended to promote a vibrant "Main Street" like ambience

[2]California Department of Transportation, *California State Scenic Highway System Map*, https://caltrans.maps.arcgis.com/apps/webappviewer/index.html?id=465dfd3d807c46cc8e8057116f1aacaa, accessed February 2025.

throughout the Downtown Core with mid-rise mixed-use development and active commercial uses on the ground floor building frontages along Carson Street and Avalon Boulevard. Consistent with the General Plan DMU land use designation, the Modified Project would develop a mix of uses on the Project Site with retail, restaurants, and other active commercial uses on the ground level that promote pedestrian activities. The Modified Project would develop a new City Hall and a hotel along Carson Street, with an option to build an interactive museum facing Carson Street. A performing arts center would be located at the corner of Avalon Boulevard and Desford Street. Primary access to the new City Hall and hotel would face Carson Street. The performing arts center would have its primary vehicular access be on Avalon Boulevard and primary vehicular access would be at the elliptical plaza.

The Modified Project would permit structures to be taller than the mid-rise structures that are currently designated for the DMU land use designation. The Modified Project would amend the General Plan to permit future development on the Project Site to be constructed with building heights of up to 22 stories, or 240 feet. The building heights would be step-back from the adjacent residential uses north of the Project Site to allow the Modified Project to transition in height and reduce the scale of the proposed buildings from the adjacent residential neighborhood.

If the Modified Project is approved, the proposed Carson Civic Center Specific Plan would constitute the zoning and General Plan land use designation for the Project Site, and future development on the Project Site would be required to be consistent with the development standards and design guidelines contained within the Specific Plan. The design and architecture of the structures on the Project Site would be controlled by the provisions of the proposed Specific Plan. Future development on the Project Site would be evaluated for its design, such as building orientation, building bulk and scale, building height and setbacks, and landscaping. The design of the individual development would be refined and would undergo separate review to ensure that the details of future development are consistent with the land uses and design envisioned in the proposed Specific Plan and that the development standards and design guidelines of the proposed Specific Plan are implemented.

Section 94111.4 of the City's Zoning Code requires all development within a Specific Plan district to undergo a Development and Site Plan Review. The Development and Site Plan Review for future development on the Project Site would ensure that future development on the Project Site would be compatible with the adjacent single-family residential uses, as well as other uses in the surrounding area.

Although the Modified Project would result in the development of structures that are taller than the low-rise structures surrounding the Project Site, the Modified Project is not expected to degrade the existing visual character of the Project Site and its surrounding area. Some of the goals and objectives of the Modified Project is to enhance the Project Site as the "heart" of the City, foster a vibrant downtown atmosphere, reaffirm downtown as a attractive hub for large public events, to provide an iconic civic center and a vibrant public realm that is organized around open space areas, streets, and walkway. The changes associated with the Modified Project would not degrade the visual character of the Project Site. Rather, it would result in development that makes the Project Site appear more prominent and distinct while being sensitive to the surrounding uses.

With the approval of the Modified Project, the Modified Project would not conflict with applicable regulations governing scenic quality, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would have the same height limits as the Modified Project. With the approval of the Modified Project, the Entertainment Retail Option would not conflict with

applicable regulations governing scenic quality. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?***

The Project Site is located in an urbanized area with a moderate level of ambient lighting. Existing nighttime lighting sources on the Project Site and in the surrounding area include streetlights, vehicle headlights, parking lot lighting, security lighting, and interior and exterior building illumination.

Construction would occur during daylight hours and would not require any lighting. Construction equipment would not contain reflective surfaces that could generate substantial glare. Therefore, no light or glare impacts would occur during construction.

Operations of the Modified Project would result in similar types of lighting as existing conditions. Lighting would be provided on the proposed structures, within open space areas, and along streets adjacent to and within the Project Site. As the Modified Project would result in higher density development compared to existing uses on the Project Site, the amount of lighting on the Project Site is anticipated to increase. Nevertheless, the Modified Project would be required to comply with Part 3-A, Division 4 (Lighting and Glare) of the City's Zoning Code. The City's lighting and glare regulations require outdoor lighting to be designed, located, and installed to be directed downward or toward structures, be shielded or fully shielded, and to be well maintained to prevent glare, light trespass, and light pollution. Light sources cannot be visible off site and must be directed downward and away from adjoining properties and public rights-of-way so that no on-site light fixture directly illuminates an area off site. The City's lighting and glare regulations also limit the output level for outdoor lighting based on a site's zoning district. Compliance with the City's Lighting and Glare regulations would limit the amount of glare, direct illumination, or light spillover that would occur on adjacent properties or on roadways.

In addition to the lighting and glare requirements in the City's Zoning Code, the proposed Specific Plan also includes lighting standards. These standards include avoiding lighting that interferes with residential uses and shielding lighting to avoid lighting from shining into residential units.

With regards to glare, the Modified Project would permit metal cladding and glass curtain walls. To ensure that metal cladded walls and glass curtain walls would not create glare that adversely affect views in the surrounding area, **Mitigation Measure AES-1** would be required. This mitigation measure would require building materials to be non-reflective or have a non-reflective coating.

With compliance with the City's Zoning Code lighting and glare regulations, the proposed Specific Plan lighting standards, and implementation of **Mitigation Measure AES-1**, the Modified Project would not generate a substantial amount of light and glare that would affect the surrounding area. Therefore, with implementation of **Mitigation Measure AES-1**, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would use similar types of lighting as the Modified Project. The Entertainment Retail Option would also permit similar types of materials as the Modified Project, some of which may be a source of glare. **Mitigation Measure AES-1** would also apply to the Entertainment Retail Option. With implementation of **Mitigation Measure AES-1**, along with compliance with the City's Zoning Code lighting and glare regulations, and the proposed Specific Plan lighting standards, the Entertainment Retail Option would not create a new source of

substantial light or glare. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Mitigation Measures**

**AES-1** Building materials, including metal and glass curtain walls, shall be non-reflective or have a non-reflective coating. The use of reflective glass and other mirror-like materials that are highly reflective shall be prohibited.

### 3.1.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and the Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.1.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.1.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

The Certified EIR did identify any mitigation measures related to aesthetics.

### 3.1.6 CONCLUSION

As discussed above, the Modified Project and the Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.2 AGRICULTURE AND FORESTRY RESOURCES

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **AGRICULTURE AND FORESTRY RESOURCES**. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment Project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project: | | | | | |
| (a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | No Impact | No | No | No | No |
| (b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | No Impact | No | No | No | No |
| (c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | No Impact | No | No | No | No |
| (d) Result in the loss of forest land or conversion of forest land to non-forest use? | No Impact | No | No | No | No |
| (e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | No Impact | No | No | No | No |

## 3.2.1 IMPACT DETERMINATION IN THE CERTIFED EIR

The Certified EIR concluded that there are no agricultural resources in the Planning Area, and no impacts related to any of the subcategories listed above will occur as a result of the General Plan Update.

### General Plan Update Policies that Address Agriculture and Forestry Resources

None

### Mitigation Measures

None required.

### 3.2.2. DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

***(b) Would the Project conflict with existing zoning for agricultural use, or a Williamson Act Contract?***

Due to its urban setting, the Project Site and its surroundings are not included in the Farmland Mapping and Monitoring Program of the California Department of Conservation.[3] In addition, the Project Site is not located within a zone designated for agricultural use or an area that is designated as Williamson Act contract lands. No agricultural uses or related operations are present within the Project Site or in the surrounding area. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project. No agricultural uses or related operations are located on the Project Site, the Project Site is not zoned for agricultural use, and the Project Site is not affiliated with the Williamson Act Contract. The Entertainment Retail Option would not conflict with applicable regulations governing scenic quality. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?***

***(d) Would the Project result in the loss of forest land or conversion of forest land to non-forest use?***

The Project Site is located within an urban area that is not zoned as forest land. There are no forest land or forest resources located on the Project Site or in the surrounding area. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project. The Project Site is not zoned for forest land or timberland. The Entertainment Retail Option would not result in the loss of forest land or convert forest land to non-forest use. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[3]California Department of Conservation, *California Important Farmland Finder*, https://maps.conservation.ca.gov/DLRP/CIFF/, accessed February 2025.

***(e) Would the Project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?***

As discussed in the response to Checklist Questions 3.2.2a through 3.2.2d, above, no agricultural or forestry operations occur on the Project Site or its vicinity. The Modified Project would not introduce any changes that would result in the conversion of farmland or forest land to non-agricultural or forest use, respectively. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would not introduce any changes that would result in the conversion of farmland or forest land to non-agricultural or forest use, respectively. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.2.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.2.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.2.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

The Certified EIR did identify any mitigation measures related to agriculture and forestry resources.

### 3.2.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.3 AIR QUALITY

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **AIR QUALITY**: Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project: | | | | | |
| (a) Conflict with or obstruct implementation of the applicable air quality plan? | Less Than Significant | No | No | No | No |
| (b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | Significant and Unavoidable | No | No | No | No |
| (c) Expose sensitive receptors to substantial pollutant concentrations? | Significant and Unavoidable | No | No | No | Yes |
| (d) Result in other emissions (such as those leading to odors adversely affecting a substantial number of people? | Significant and Unavoidable | No | No | No | No |

## 3.2.1 IMPACT DETERMINATION IN THE CERTIFIED EIR

### *(a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?*

The Certified EIR states that CEQA requires general plans to be evaluated for consistency with the current Air Quality Management Plan (AQMP). Because the AQMP strategy is based on projections from local general plans, only new or amended general plan elements, specific plans, or individual projects under the general plan need to undergo a consistency review. Projects considered consistent with the local general plan are consistent with the air quality-related regional plan. Indicators of consistency include:

- Control Strategies: Whether implementation of a project would increase the frequency or severity of existing air quality violations; would cause or contribute to new violations; or would delay the timely attainment of AAQS or interim emissions reductions within the AQMP.
- Growth Projections: Whether implementation of the project would exceed growth assumptions within the AQMP, which, in part, bases its strategy on growth forecasts from local general plans.

### *Construction*

**Control Strategies.** The Certified EIR stated that the South Coast Air Basin (SCAB) is designated nonattainment for ozone ($O_3$) and fine particulate matter 2.5 micrometers and smaller ($PM_{2.5}$) under the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS), nonattainment for lead (Los Angeles County only) under the NAAQS, and nonattainment for particulate matter 10 micrometers and smaller ($PM_{10}$) under the CAAQS. The General Plan Update involves long-term growth associated with buildout of the City. Thus, the emissions of criteria pollutants associated with future developments under the General Plan Update

could exceed South Coast Air Quality Management District (SCAQMD) thresholds for criteria pollutants. Future development under the General Plan Update will be required to comply with the California Air Resources Board's (CARB) requirements to minimize short-term emissions from on-road and off-road diesel equipment, including the Airborne Toxic Control Measure (ATCM) to limit heavy-duty diesel motor vehicle idling to no more than 5 minutes at any given time, and with SCAQMD's regulations, such as Rule 403 for controlling fugitive dust and Rule 1113 for controlling volatile organic compound (VOC) emissions from architectural coatings.

Furthermore, as applicable to the type of growth, individual projects under the General Plan Update would comply with fleet rules to reduce on-road truck emissions. Compliance with these measures and requirements would be consistent with and meet or exceed the AQMP requirements for control strategies intended to reduce emissions from construction equipment and activities. Therefore, the Certified EIR concluded that construction anticipated by the General Plan Update would be consistent with the AQMP under the first indicator.

**Growth Projections.** The Certified EIR concluded that the General Plan Update would result in an increase in short-term employment compared to existing conditions. Although construction anticipated by the General Plan Update would generate construction workers, it would not necessarily create new construction jobs. Construction-related jobs generated by the General Plan Update would likely be filled by employees within the construction industry within the City and the greater Los Angeles County region. Construction industry jobs generally have no regular place of business, as construction workers commute to job sites throughout the region, which may change several times a year. Moreover, these jobs would be temporary in nature. Therefore, the Certified EIR concluded that construction jobs generated by the General Plan Update would not conflict with the long-term employment or population projections upon which the AQMPs are based.

***Operation***

**Control Strategies.** Future development under the General Plan Update would be required to comply with CARB motor vehicle standards, SCAQMD regulations for stationary sources and architectural coatings, Title 24 energy efficiency standards, and to the extent applicable, to the growth projections in the Southern California Association of Governments (SCAG) 2016–2040 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Connect SoCal, which were incorporated into the 2016 AQMP.

The AQMP includes land use and transportation strategies from the 2016–2040 RTP/SCS that are intended to reduce vehicle miles traveled (VMT) and resulting regional mobile source emissions. The applicable land use strategies include planning for growth around livable corridors; providing more options for short trips/neighborhood mobility areas; supporting zero emission vehicles and expanding vehicle charging stations; and supporting local sustainability planning. The applicable transportation strategies include managing through the Transportation Demand Management (TDM) Program and the Transportation System Management (TSM) Plan including advanced ramp metering, and expansion and integration of the traffic synchronization network; and promoting active transportation. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as the Southern California Association of Governments SCAG and SCAQMD, although some can be furthered by individual development projects.

The location, design, and land uses of the growth anticipated by the General Plan Update would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing commercial and residential density with over 95 percent of new residential development planned for multi-family dwelling units, which would allow for increased mixed-use density at infill locations and near public transit. Several transit agencies provide local and regional transit service to residents in the City including Metro, Long Beach Transit, Compton

Renaissance Transit, Gardena Transit, and Torrance Transit. Several routes in the City provide access to the Metro A (Blue) Line, which passes through the eastern edge of the City without stops. The Harbor Gateway Transit Center is located just west of the City, adjacent to I-110. This transit center is a stop on the Metro Silver Line, which provides critical regional access to downtown Los Angeles and east to the El Monte Station. Connection to the Transit Center is provided by Metro Lines 52 and 246. Both Long Beach Transit and Torrance Transit provide access to Long Beach, including the Long Beach Transit Gallery, located at the downtown Long Beach A Line station. Torrance Transit also provides access to the South Bay, including the South Bay Galleria Transit Center and the Redondo Beach Pier.

The General Plan Update focuses on infill development and revitalization to help the City transition from a predominantly industrial and suburban community to a complete City with an integrated mix of housing, employment, educational, cultural, and recreational options balanced with industrial uses. These efforts are targeted in the Core and in centers around the Core, expanding on recent development along Carson Street. Development in the centers, along key corridors, and large opportunity sites such as the Shell property on East Del Amo Boulevard and South Wilmington Avenue are envisioned to be connected by community-oriented boulevards that feature public gathering spaces and pedestrian- and bicycle-oriented designs. New land use designations that introduce greater flexibility through emphasis on mixed uses instead of single uses were to facilitate development to achieve this vision and respond to the need to accommodate the City's growing and diverse population.

The General Plan Update outlines strategies for greater integration of uses in different parts of the City and a better connection between employment and residential uses, with more areas designated for mixed-use development. It recognizes the physical elements that help define the character of the City, including existing residential neighborhoods, Downtown Core, industrial/business centers, and corridors. This structure helps establish a clear multi-modal network throughout the City by focusing on both community destinations as well as the efficiency, safety, and convenience of the modes of transportation in between. Higher densities, especially in mixed-use designations, increase capacity for residential development near community-serving commercial, retail, and office uses as well as schools, parks, and recreational facilities, and improvements to the bicycle, pedestrian, and road networks will make it easier for residents to travel throughout the community. Therefore, the General Plan Update does not conflict with AQMP land use and transportation strategies that are intended to reduce VMT and the resulting regional mobile source emissions. The Certified EIR concluded that the General Plan Update is consistent with the AQMP under the first indicator.

**Growth Projections.** The emissions inventory for the SCAB is formed, in part, by existing city and county general plans. The AQMP is based on population, employment and VMT forecasts by SCAG. A project might be in conflict with the AQMP if the development would be greater than that anticipated in the local general plan and SCAG's growth projections. Future development in the City that is consistent with the General Plan Update would increase vehicle trips and VMT that would result in emissions of $O_3$ precursors and particulate matter.

Individual projects under the General Plan Update would be required to undergo subsequent environmental review pursuant to CEQA and would be required to demonstrate compliance with the AQMP. Individual projects would also be required to demonstrate compliance with SCAQMD rules and regulations governing air quality.

The City would continue to coordinate with SCAQMD and SCAG to ensure Citywide growth projections, land use planning efforts, and local development patterns are accounted for in the regional planning and air quality planning processes. Therefore, operation of the General Plan Update would not conflict with or obstruct the implementation of the AQMP. The General Plan

Update policies listed below would potentially reduce emissions, which would address potential impacts related to conflicts with the AQMP.

***(b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

***Construction***

The Certified EIR stated that construction has the potential to create regional air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from each specific Project Site. In addition, fugitive dust emissions would result from construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOCs. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions. However, as there are no specific projects currently approved or proposed under the General Plan Update and there is no knowledge as to timing of construction, location or the exact nature of future projects, analysis of construction emissions is speculative at best. Information regarding specific development projects, including specific buildings and facilities proposed to be constructed, construction schedules, quantities of grading, and other information will be required in order to provide a meaningful estimate of emissions. Since this information is unknown, emissions modeling is not feasible.

Each future project developed under the General Plan Update would be required to comply with SCAQMD rules and regulations, as well as conduct their own applicable CEQA analysis, and significance determination would be based on specifics associated with each individual project. Furthermore, future construction activities under the General Plan Update would be required to comply with the CARB ATCM, which limits diesel powered equipment and vehicle idling to no more than five minutes at a location, and the CARB In-Use Off-Road Diesel Vehicle regulation, CARB Truck and Bus regulation, and CARB ACT regulation, which all require construction equipment and vehicle fleet operators to repower or replace higher-emitting equipment with less polluting models, including zero- and near-zero-emissions on-road truck technologies as they become developed and commercially available. Additionally, construction of future development will be required to comply with SCAQMD rules and regulations, including Rule 403 for the control of fugitive dust and Rule 1113 for the control of VOC emissions from architectural coatings. Mandatory compliance with these CARB and SCAQMD rules and regulations would reduce emissions, particularly for nitrogen oxide ($NO_X$), $PM_{10}$, and $PM_{2.5}$, during future construction activities under the General Plan Update.

Even with mandatory compliance with CARB and SCAQMD rules and regulations, it is possible that some future development projects could be large enough in scale and/or intensity such that many pieces of heavy-duty construction equipment and/or heavy-duty trucks may be required and that construction period emissions could exceed the SCAQMD significance thresholds. Therefore, the Certified EIR concluded that construction activities could result in a significant regional air quality impact.

***Operation***

The Certified EIR stated that operation of future development under the General Plan Update would generate criteria pollutant emissions from vehicle trips traveling within the City, energy sources such as natural gas combustion, and area sources such as landscaping equipment and consumer products usage. The on-road mobile sources related to operation of the General Plan Update include passenger vehicles, on-site use of off-road equipment, and delivery trucks. VMT data takes into account ridership, mode, and distance on freeways and local streets.

The net change in operational emissions from existing conditions compared to existing-plus-buildout of new development under the General Plan Update would not exceed the SCAQMD regional significance thresholds. The net change in emissions at 2040 buildout would be negative compared to existing conditions primarily due to the focus of the General Plan Update on infill development and revitalization to help the City achieve an integrated land use mix that accommodates growth while reduces VMT and associated emissions, improvements in vehicle emissions standards and, to a lesser extent, improvements in building energy efficiency standards. It should be noted that the SCAQMD thresholds were specifically developed for use in determining significance for individual projects and not for program-level documents, such as the General Plan Update. Furthermore, development of the new residential and non-residential uses would be based on market demand and would be constructed over the buildout duration through 2040. Overlapping emissions from the construction and operation of new phased development could occur under the General Plan Update, and SCAQMD requires such overlapping emissions to be compared to the numeric thresholds for operations. It is possible that some future development projects could be large enough in scale and/or intensity such that overlapping emissions from the construction and operation of new phased development could exceed the SCAQMD significance thresholds and result in a significant regional air quality impact.

The General Plan Update policies, listed below, would potentially reduce emissions and could potentially address impacts. In addition, future development under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on the specifics of each individual project. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require mitigation.

### *(c) Would the Project expose sensitive receptors to substantial pollutant concentrations?*

#### *Construction*

The Certified EIR concluded that construction of future individual projects under the General Plan Update has the potential to create localized air quality impacts through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from the Project Site. In addition, fugitive dust emissions would result from construction activities. During the finishing phase, the application of architectural coatings (i.e., paints) and other building materials would release VOC emissions. Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation and, for dust, the prevailing weather conditions.

SCAQMD provides guidance for conducting the analysis of localized emissions in their Localized Significance Threshold Methodology, which relies on on-site mass emission rate screening tables and project-specific dispersion modeling for sites that are one, two, and five acres in size. SCAQMD has established screening criteria that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance thresholds and, therefore, not cause or contribute to an exceedance of the applicable ambient air quality standards without project-specific dispersion modeling. The screening criteria depend on: (1) the area in which the project is located; (2) the size of the Project Site; and (3) the distance between the Project Site and the nearest sensitive receptor. Localized significance thresholds are applicable to NOx, CO, $PM_{10}$, and $PM_{2.5}$. Should individual projects exceed applicable screening level thresholds in the SCAQMD Localized Significance Threshold Methodology (or successor guidance document), project-specific dispersion modeling may be conducted to demonstrate that no exceedance of the concentration-based thresholds (from which the screening tables are derived) would occur.

Concentrations of toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. Sensitive receptors may be located within close proximity to future projects under the General Plan Update. SCAQMD recommends that construction health risk assessments be conducted for substantial sources of diesel particulate matter (DPM) emissions (e.g., projects with substantial construction activities, such as earth-moving and excavation construction activities) in proximity to sensitive receptors and has provided guidance for analyzing mobile source diesel emissions. Localized DPM emissions strongly correlate with localized $PM_{2.5}$ emissions. However, localized analysis does not directly measure health risk impacts. Therefore, future projects under the General Plan Update may potentially require project-specific dispersion modeling to evaluate potential health risk impacts associated with construction.

However, there are no specific projects currently approved or proposed under the General Plan Update and there is no information regarding specific development projects, including specific buildings and facilities proposed to be constructed, construction schedules, quantities of grading, and other information that would be required in order to provide a meaningful estimate of emissions. Since this information is unknown, emissions modeling is not feasible and would be speculative at best. Each future project developed under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on specifics of each individual project. Through each project's individual environmental review process, localized emissions may be quantified and compared against project-specific thresholds. Individual projects that exceed the thresholds would normally be considered significant and require mitigation. Because potential new development could occur close to existing sensitive receptors, the development that would be accommodated by the General Plan Update has the potential to expose sensitive receptors to substantial pollutant concentrations. The Certified EIR concluded that construction equipment exhaust combined with fugitive particulate matter emissions has the potential to expose sensitive receptors to substantial concentrations of criteria air pollutant emissions or DPM and result in a potentially significant impact.

### *Operation*

**Local Air Quality.** The Certified EIR stated that SCAQMD recommends the evaluation of localized air quality impacts on sensitive receptors in the immediate vicinity of a project. However, the impacts are based on specific equipment and operations. Because the exact nature, location, and operation of future developments are unknown, quantification of potential localized operational impacts and health risks would not be feasible and would be speculative. Land uses that have the potential to generate substantial stationary sources of emissions that would require a permit from SCAQMD include industrial land uses, such as chemical processing facilities and gasoline-dispensing facilities. Warehouses and distribution centers may generate substantial DPM emissions from off-road equipment use and truck idling. Under the General Plan Update, industrial-type land uses such as the aforementioned land uses may be permitted within the Planning Area. As operation of some of these future developments may occur within proximity to sensitive receptors, there is the potential for localized emissions to exceed the significance thresholds and result in a potentially significant impact.

The General Plan Update policies, listed below, would potentially reduce emissions and could potentially address impacts. In addition, future development under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on specifics of each individual project. The Certified EIR concluded that through the environmental review process of each individual project, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require mitigation.

**Intersection Hotspot Analysis.** The Certified EIR stated that the potential for the General Plan Update to cause or contribute to CO hotspots was evaluated by comparing project intersections (both intersection geometry and traffic volumes) with prior studies conducted by SCAQMD in support of their AQMPs and considering existing background CO concentrations. This comparison demonstrates that the General Plan Update would not cause or contribute considerably to the formation of CO hotspots, that CO concentrations at project intersections would remain well below the ambient air quality standards, and that no further CO analysis is warranted or required.

CO levels in the Planning Area are substantially below the federal and state standards. Maximum CO levels in recent years are 3.0 to 6.1 parts per million (ppm) (1-hour average) and 2.1 to 4.6 ppm (8-hour average). CO levels decreased dramatically in the SCAB with the introduction of the catalytic converter in 1975. No exceedances of CO have been recorded at monitoring stations in SCAB since 2003, and SCAB is currently designated as a CO attainment area for both the CAAQS and NAAQS. Thus, it is not expected that CO levels at General Plan Update-impacted intersections would rise to the level of an exceedance of these standards.

For the 2003 AQMP, SCAQMD conducted CO modeling for the four worst-case intersections in SCAB: (1) Wilshire Boulevard and Veteran Avenue; (2) Sunset Boulevard and Highland Avenue; (3) La Cienega Boulevard and Century Boulevard; and (4) Long Beach Boulevard and Imperial Highway. In the 2003 AQMP, SCAQMD notes that the intersection of Wilshire Boulevard and Veteran Avenue is the most congested intersection in Los Angeles County, with an average daily traffic volume of approximately 100,000 vehicles per day. This intersection is located near the I-405 on- and off-ramps in West Los Angeles. The evidence provided in the 2003 AQMP shows that the peak modeled CO concentration due to vehicle emissions at these four intersections was 4.6 ppm (1-hour average) and 3.2 ppm (8-hour average) at Wilshire Boulevard and Veteran Avenue. When added to the existing background CO concentrations, the screening values would be up to 10.7 ppm (1-hour average) and 7.8 ppm (8- hour average). Based on the intersection volumes identified at these modeled intersections, if a project's traffic levels exceed 100,000 vehicles per day at any project impacted intersection, there would be the potential for a significant impact and dispersion modeling would need to be conducted to determine the project-level impact.

Based on roadway segment volumes under the buildout horizon, the roadway segment with the maximum potential peak traffic for eastbound and westbound traffic is Del Amo Boulevard between Central Avenue and Alameda Street for eastbound and westbound traffic. For northbound and southbound traffic, the roadway segment with the maximum potential peak traffic would be that of Wilmington Avenue between 230th Street and Sepulveda Boulevard. These segments represent the largest east/westbound and north/southbound traffic in the City. While these roadway segments do not intersect, even assuming that these traffic volumes would occur at an intersection, combined would have a peak roadway intersection volume of approximately 61,860 vehicles per day, which is below the 100,000 vehicles per day modeled in SCAQMD's 2003 AQMP CO attainment demonstration. Furthermore, CO emissions from vehicles have substantially reduced compared to 2003 era vehicles based on improved vehicle emissions standards. As a result, CO concentrations are expected to be less than those estimated in the 2003 AQMP, which would not exceed the applicable thresholds. Thus, this comparison demonstrates that the General Plan Update would not contribute considerably to the formation of CO hotspots, and no further CO analysis is required. The Certified EIR concluded that the General Plan Update would result in a less-than-significant impact with respect to CO hotspots.

**Toxic Air Contaminants.** The Certified EIR stated that construction and operation of the General Plan Update would result in TACs emissions, predominantly from diesel particulate emissions of on- and off-road vehicles during construction and from the operation of diesel-fueled equipment or generators during operational activities. Because the exact nature, location, and operation of the future developments are unknown, and because health risk impacts from TACs are cumulative over

the life of the nearby receptors, quantification of potential health risks would be speculative. However, as construction and operation of these future developments may occur within close proximity to sensitive receptors, there is the potential for risk to exceed regulatory levels. Therefore, the Certified EIR concluded that health risk with respect to the development anticipated by the General Plan Update would be potentially significant.

**Health Impacts.** The Certified EIR stated that because regional emissions exceed the SCAQMD regulatory thresholds during construction and operational activities, there is the potential that these emissions would exceed the CAAQS and NAAQS, thus, resulting in a health impact. Without knowing the exact specifications for all projects that may be developed under the General Plan Update, there is no way to accurately calculate the potential for health impacts from the overall General Plan Update. Individual projects would be required to provide their own environmental assessments to determine health impacts from the construction and operation of their projects. Because there is no way to determine the potential for these projects to affect health of sensitive receptors within the City of Carson, the Certified EIR concluded that the General Plan Update would result in a potentially significant health impact.

### *(d) Would the Project result in other emissions (such as those leading to odors adversely affecting a substantial number of people*

**Construction.** The Certified EIR concluded that potential sources that may emit odors during construction activities include the use of architectural coatings and solvents. SCAQMD Rule 1113 (Architectural Coatings) limits the amount of VOCs from architectural coatings and solvents. According to the SCAQMD CEQA Air Quality Handbook, construction equipment is not a typical source of odors. Odors from the combustion of diesel fuel would be minimized by complying with the CARB ATCM that limits diesel-fueled commercial vehicle idling to five minutes at any given location, which was adopted in 2004. The General Plan Update would also comply with SCAQMD Rule 402 (Nuisance), which prohibits the emissions of nuisance air contaminants or odorous compounds. Through adherence with mandatory compliance with SCAQMD Rules and state measures, construction activities and materials would not create objectionable odors. Construction of the General Plan Update's uses would not generate nuisance odors at nearby air quality sensitive receptors.

Even with mandatory compliance with CARB and SCAQMD rules and regulations, however, it is possible that some future development projects could be large in scale and/or intensity such that many pieces of heavy-duty construction equipment and/or heavy-duty trucks may be required and that construction period emissions could exceed the SCAQMD significance thresholds for attainment, maintenance or unclassified pollutants. Therefore, the Certified EIR concluded that project-related construction activities could result in a significant air quality impact with respect to other emissions.

### *Operation*

The Certified EIR stated that the General Plan Update's land uses are related to growth in residential, office, retail/restaurant, commercial, and park land uses and will not introduce substantial sources of other emissions, including odors. According to the SCAQMD CEQA Air Quality Handbook, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The General Plan Update could result in future development of commercial or industrial land uses that could generate odors. Additionally, even with mandatory compliance with CARB and SCAQMD rules and regulations, it is possible that some future development projects could be large in scale and/or intensity such that many heavy-duty trucks may be required and that operational period emissions could exceed the SCAQMD

significance thresholds for attainment, maintenance, or unclassified pollutants. Therefore, the Certified EIR concluded that project-related operational activities could result in a significant air quality impact with respect to other emissions.

**General Plan Update Policies that Address Air Quality**

***Land Use and Revitalization***

*Guiding Policies*

LUR-G-2 Balance employment and housing within the community to provide more opportunities for Carson residents to work locally, cut commute times, and improve air quality.

LUR-G-4 Promote a diversity of complementary uses in different parts of the City, including mixed flexible office space, retail, dining, residential, hotels, and other compatible uses, to foster vibrant, safe, and walkable environments, with flexibility to accommodate emerging uses and building typologies

LUR-G-6 Encourage revitalization of corridors as pedestrian-oriented, mixed-use residential, retail, and office community spines, serving as focal points for neighborhood amenities and services, and helping foster neighborhood identity and vitality.

LUR-G-7 Develop Carson's central Core—extending approximately 1.7 miles both east-west along West Carson Street and north-south along Avalon Boulevard and including the South Bay Pavilion—into a vibrant, pedestrian-oriented mixed-use hub of the community, with housing, retail, and other commercial uses, and civic uses and community gathering spaces.

LUR-G-9 Locate medium and high-density development along major corridors and major re-development sites in the central Core, to focus housing near regional access routes, transit stations, employment centers, shopping areas, and public services.

LUR-G-11 Encourage mixed-use development (two or more uses within the same building or in close proximity on the same site), especially in the Core area, to promote synergies between uses.

*Implementing Policies*

LUR-P-1 Where feasible, locate higher density residential uses in proximity to job centers and commercial centers in order to discourage long commute times and encourage pedestrian traffic and provide a consumer base for commercial uses.

LUR-P-8 Promote development of neighborhood-scaled commercial centers in residential areas to serve the everyday needs of nearby residents.

LUR-P-11 Promote ground level commercial uses to foster pedestrian activity and visual engagement and provide commercial uses to serve residents of surrounding neighborhoods. Where commercial uses are or were present as of 2021, at least half of the commercial area shall be retained or replaced as part of new development. Where more than 0.1 FAR ground level active commercial uses are provided (new or through replacement), the City may grant residential density increase up to 60 percent on a graduated scale as specified in the Zoning Ordinance and Table 2-2.

LUR-P-12 Prohibit uses in the Core that do not add to a strong pedestrian character, such as warehouses, gas stations, drive-through establishments, industrial, and other new development whose design prioritizes automobile access.

LUR-P-13 Focus new residential, commercial, and employment-generating land uses along Carson Street and Avalon Boulevard in order to support higher-frequency transit service. Provide adequate infrastructure, such as bus lanes or bus shelters at bus stops, to support transit service usage.

LUR-P-16 Where larger parcels—such as the Shell site—are redeveloped, require development to implement urban design policies, including creation of smaller blocks (typically with no dimension larger than 300 to 600 feet dependent on use, with smaller blocks in residential areas) to create walkable, urban environments; buildings and landscapes that relate to the surroundings, with high-level of public-realm amenities, such as tree-lined streets; sidewalks, pedestrian paths, and crossings; and plazas and other gathering spaces for workers and visitors. Site planning for new construction should ensure that streets are lined with occupied buildings or landscapes, with parking and service facilities tucked behind or away from public streets.

LUR-P-18 Promote infill mixed-use development in either a vertical or horizontal configuration when aging shopping centers are redeveloped to create mixed-use corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.

LUR-P-24 Promote the development of sites designated as Business Residential Mixed Use (BRMU) with a vibrant mix of business and residential uses that include:

- For the Shell site, require at least a minimum of 25 acres of open space, 18 of which as a centralized park or open space and seven acres along the western border of the property as a Greenway Corridor/buffer. Exact locations and acreages should be specified during project planning.
- For the Shell site, require at least a minimum nine acres of General Commercial at the south-west corner of Del Amo Boulevard and Wilmington Avenue or at a centralized location. Other commercial uses are encouraged throughout the site as mixed-use development.
- Encourage residential development with a range of housing types, and technology, research and development, and office uses if determined to be suitable from an environmental perspective.
- Require development to be connected to the surroundings, with through streets, and walkable urban design patterns. See additional policies in Chapter 4: Community Character, Identity, and Design Element.
- When housing is proposed adjacent to industrial uses, require the development of a cohesive master or specific plan to include surrounding property owners to ensure compatibility. The Shell site is required to have a similar plan to outline long-term growth of the site.

### *Circulation*

*Guiding Policies*

CIR-G-1 Provide a balanced transportation system of multimodal networks providing a broad range of travel options to make transportation convenient, comfortable, and safe for people of all abilities.

CIR-G-2 Promote bicycling and walking, and support and improve connections to local and regional transit service.

CIR-G-3 Manage the transportation network to minimize roadway congestion, while balancing traffic Level of Service (LOS) objectives with promoting reduction in vehicle miles traveled and considerations of community character and design.

CIR-G-4 Encourage the development of a multimodal freight transportation system that balances the need for effective and efficient transportation of goods with the health and wellbeing of the community.

*Implementing Policies*

CIR-P-1 Update the City's Bicycle Plan, identifying a citywide bicycle network of off-street bike paths, on-street bike lanes and bike streets. As part of the plan, consider bicycle lockers, secure bike parking, pavement condition, and access to transit, parks, and schools throughout the City. The update of the Bicycle Plan should strategically identify projects that will improve equity, the environment, reduce trips on the roadway system, and prioritize projects that align with primary local active transportation grant funding programs including Metro, SCAG, and Caltrans.

CIR-P-2 Develop a First Last Mile Plan to improve walking and biking connections to future and existing transportation hubs.

CIR-P-3 Establish bike hubs (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes), at key transit nodes or commercial nodes.

CIR-P-4 Evaluate opportunities, such as new development or changes to the transit network, to enhance existing and proposed Class II bike lanes and Class III bike routes to protected bike lanes and bike routes to bike lanes or bike boulevards.

CIR-P-16 Work with Long Beach Transit to serve local neighborhoods and connect residences with shopping, employment, transit, and recreational opportunities.

CIR-P-17 Participate in and encourage collaboration among adjacent cities to provide a more reliable public transportation system the area.

CIR-P-19 Work with regional transit services to develop an on-demand transportation system that caters to senior populations and people with disabilities.

CIR-P-20 Evaluate and adjust transit routes to better connect disadvantaged communities with major transit hubs and key destinations such as parks, schools, and healthy food opportunities.

CIR-P-21 Work with transit providers in the City to implement public transportation improvements and enhance first-last mile connections at highly utilized transit stops.

CIR-P-22 Develop a transportation demand management (TDM) ordinance. A TDM ordinance would incorporate strategies appropriate for the local context and land use as different strategies are more effective at reducing employee commute trips, while others focus on reducing residential, shopping, or other discretionary trips. Strategies will generally focus on land use, parking, transit, and active transportation.

CIR-P-23 Pursue the implementation of TDM strategies through application of the City's Transportation Study Guidelines and compliance with Senate Bill 743 that seeks to reduce per capita VMT for residential, retail, and office trips.

CIR-P-24 Encourage local public agencies and employers to implement TDM policies that promote VMT reductions. The research in this area is regularly evolving and can help identify viable and defensible VMT reduction strategies.

CIR-P-25 Evaluate the potential for strategies that can reduce VMT such as citywide bike-sharing, promote car-sharing and other electrified modes as options to reduce traffic congestion.

CIR-P-26 Prioritize and identify disadvantaged community locations to develop sustainable mobility hubs that include car-sharing, bike-sharing and public EV charging infrastructure to minimize traffic and air quality effects.

CIR-P-27 Require all new and substantially renovated office, retail, industrial, industrial, and multifamily developments to provide EV charging infrastructure and EV ready parking.

CIR-P-32 Enhance infrastructure to accommodate last mile delivery services for low carbon solutions, such as last mile bicycle delivery.

CIR-P-33 Promote the deployment of near-zero and zero-emissions trucks for urban deliveries, port drayage trips, regional, and long-haul trips by providing charging infrastructure and plug-in technologies for extended idling.

CIR-P-34 Encourage deployment of alternative-fueled vehicles through advancement of new technologies, such as autonomous vehicles that are anticipated to be a pathway to electric vehicles.

***Community Health and Environmental Justice***

*Guiding Policies*

CHE-G-2 Reduce air pollution and the incidence of respiratory illness through the land use planning process.

CHE-G-3 Proactively coordinate City air quality improvement activities with the South Coast Air Quality Management District and other regional programs, as well as with neighboring communities.

CHE-G-8 Improve bike, pedestrian, and transit connectivity to community facilities and services, especially in underserved areas.

*Implementing Policies*

CHE-P-5 Recognize and actively promote policies to create a multimodal transportation system that reduces solo driving.

CHE-P-6 Collaborate with South Coast Air Quality Management District (SCAQMD) to coordinate policies that reduce air pollution from local sources and implement programs that leverage funding from Senate Bill (SB) 535, Assembly Bill (AB) 1550, AB 617, and other sources to improve air quality and public health.

***Open Space and Environmental Conservation Element***

*Guiding Policies*

OSEC-G-17 Support regional efforts to reduce pollution from significant sources that negatively affect the City, such as port and truck pollution from the ports of Los Angeles and Long Beach.

OSEC-G-18 Continue to work with SCAQMD to reduce generation of air pollutants, improve air quality, and meet all national and state ambient air quality standards.

OSEC-G-19 Seek to reduce mobile sources of air pollution by creating denser and walkable neighborhoods, promoting transit-oriented development, and improving bicycle infrastructure, with the goal to reduce the number of miles traveled in cars and improve regional air quality.

OSEC-G-20 Seek to reduce air quality impacts of industrial and commercial uses, like oil refineries and trucking, for both mobile and stationary sources of pollution.

OSEC-G-21 Lessen exposure of sensitive uses to pollutants emitted by mobile sources by buffering freeways, major arterials, and truck routes with trees and vegetation.

OSEC-G-22 Promote clean and alternative fuel combustion in City-owned mobile equipment and vehicles.

*Implementing Policies*

OSEC-P-33 Work with SCAQMD on compliance with Rule 2305 Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions (WAIRE) for operators of warehouse distribution centers with greater than or equal to 100,000 square feet of indoor floor space in a single building.

OSEC-P-34 Continue to encourage and assist employers in developing and implementing work trip reduction plans, employee ride sharing, modified work schedules, preferential carpool and vanpool parking, or any other trip reduction approach that is consistent with the SCAQMD.

OSEC-P-35 Cooperate with the SCAQMD on regional air quality management plans, programs, and enforcement measures to achieve emissions reductions for nonattainment pollutants and their precursors—including diesel, ozone, PM2.5, and PM10—by implementing air pollution control measures as required by state and federal statutes.

OSEC-P-36 Cooperate with federal and state agencies and the SCAQMD in their efforts to reduce exposure from railroad, truck, and port emissions.

OSEC-P-43 Support SCAQMD efforts to reduce transportation-related emissions, including electric charging requirements for buildings including warehouses and truck idling restrictions.

OSEC-P-46 Continue to implement strategies to reduce government operation emissions, including City employee work trip reduction programs, work from home options, and use of alternative fuel vehicles. Strive to have the City-owned vehicle fleet to be 100 percent electric or alternative fuel by 2040 or sooner.

OSEC-P-47 Through the development review process, reduce air pollutant emissions impacts associated with facilities/industrial uses in Carson, to the greatest extent possible, by preparing air quality mitigation and monitoring measures, implementing reduction strategies, and limiting PM10 producers and other polluting industries from locating in the City.

OSEC-P-48 Continue to work with industries and regulatory agencies to monitor, regulate, and provide quick response and communication with the community in the event of an emergency impacting air quality.

OSEC-P-49 Use the City's development review process and the California Environmental Quality Act (CEQA) regulations or strategies and measured outlined in the CAP to evaluate and mitigate the local and cumulative effects of new development on air quality and greenhouse gas (GHG) emissions.

OSEC-P-35 Cooperate with the SCAQMD on regional air quality management plans, programs, and enforcement measures to achieve emissions reductions for nonattainment pollutants and their precursors—including diesel, ozone, PM2.5, and PM10—by implementing air pollution control measures as required by state and federal statutes.

OSEC-P-36 Cooperate with federal and state agencies and the SCAQMD in their efforts to reduce exposure from railroad, truck, and port emissions.

OSEC-P-43 Support SCAQMD efforts to reduce transportation-related emissions, including electric charging requirements for buildings including warehouses and truck idling restrictions.

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OSEC-P-49 Use the City's development review process and the California Environmental Quality Act (CEQA) regulations or strategies and measured outlined in the EECAP to evaluate and mitigate the local and cumulative effects of new development on air quality and GHG emissions.

### ***Land Use Revitalization***

*Guiding Policies*

LUR-G-5 Provide opportunities for new residential development in a variety of settings, including through infill and redevelopment, without impacting existing neighborhoods or creating conflicts with industrial operations, while conserving mobile homes as much as possible, which provide more affordable housing.

LUR-G-10 Provide lands to accommodate a wide range of light industrial uses including research and development, manufacturing, agricultural processing, and logistics near transportation corridors in areas where low- to moderate intensity operations would be sufficiently buffered.

LUR-G-13 Ensure adequate buffers and transitions between industrial and residential land uses as sites are developed or redeveloped.

LUR-G-14 Ensure that future industrial development is in harmony to the extent possible with adjacent residential areas. To this end, new logistics buildings must have easy access

to freeways and the Alameda corridor to prevent trucks passing on truck routes next to residential areas.

*Implementing Policies*

LUR-P-17 Ensure that new industrial uses in the Business Mixed-Use designation minimize adverse off- site air quality, noise, or glare impacts incompatible with permitted residential.

LUR-P-19 Provide lands to accommodate a wide range of light industrial uses including research and development, manufacturing, and agricultural processing near transportation corridors in areas where low- to moderate intensity operations would be sufficiently buffered. Logistics and other heavy trucking uses shall be limited to industrial areas that provide direct access to freeways and the Alameda corridor.

LUR-P-22 When industrial land directly adjacent to existing or permitted residential, parks, schools or other sensitive uses is developed or intensified, require a buffer of natural vegetation, open space, berms, and trees between the new residential development and industrial land. Other operation factors, including hours of operation, traffic, noise, and air quality impacts, shall be assessed and mitigated at time of project review.

***Community Health and Environmental Justice***

*Guiding Policies*

CHE-G-2 Protect community health from pollution by toxics and hazardous materials, especially in areas with vulnerable or sensitive populations.

*Implementing Policies*

CHE-P-4 Continue to enforce zoning and design standards that protect sensitive uses from the encroachment of land uses that would result in impacts from noxious fumes or toxins.

CHE-P-8 Avoid new toxin sources by stringently evaluating the siting of facilities that might significantly increase pollution, especially near already disproportionately impacted communities.

**Mitigation Measures**

**MM AQ-1** Applicants for new development projects within the Planning Area that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the South Coast Air Quality Management District (SCAQMD) significance thresholds during construction for emissions of $NO_X$, CO, $PM_{10}$, and/or $PM_{2.5}$ shall require the construction contractor to use equipment that meets the US Environmental Protection Agency (USEPA) Tier 4 emissions standards for off-road diesel-powered construction equipment with more than 50 horsepower, unless it can be demonstrated to the City of Carson Department of Building and Safety that such equipment is not available.

Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine, as defined by the California Air Resources Board's (CARB) regulations.

Prior to construction, the project engineer shall ensure that all plans for construction phases (e.g., demolition, grading) that would exceed the SCAQMD significance

thresholds clearly show the requirement for EPA Tier 4 or higher emissions standards for construction equipment over 50 horsepower. During construction, the construction contractor shall maintain a list of all operating equipment in use on the construction site for verification by the City of Carson Department of Building and Safety. The construction equipment list shall state the makes, models, and numbers of construction equipment on-site. Equipment shall be properly serviced and maintained in accordance with the manufacturer's recommendations. Construction contractors shall also ensure that all nonessential idling of construction equipment is restricted to five minutes or less in compliance with Section 2449 of the California Code of Regulations, Title 13, Article 4.8, Chapter 9.

**MM AQ-2** Applicants for new development projects within the Planning Area that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the SCAQMD significance thresholds during construction for emissions of volatile organic compounds (VOCs) as a result of VOC off-gassing emissions from architectural coatings and industrial maintenance coatings shall require the construction contractor to use SCAQMD Low-VOC and/or Super-Compliant VOC architectural coatings and industrial maintenance coatings such that daily volume of coatings applied would not result in emissions that exceed the SCAQMD significance threshold for VOC, unless it can be demonstrated to the City of Carson Department of Building and Safety that such coatings for a required application are not available. During construction, the construction contractor shall maintain a list of all architectural coatings and industrial maintenance coatings in use on the construction site and the daily volumes of coatings applied for verification by the City of Carson Department of Building and Safety.

**MM AQ-3** Applicants for new development projects within the Planning Area that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that exceed the South Coast Air Quality Management District significance thresholds during operations shall, prior to issuance of a building permit for new development projects within the General Plan Update area, show on the building plans that all major appliances (dishwashers, refrigerators, clothes washers, and dryers) to be provided/installed are Energy Star–certified appliances or appliances of equivalent energy efficiency. Installation of Energy Star or equivalent appliances shall be verified by the City of Carson Department of Building and Safety prior to issuance of a certificate of occupancy

**MM AQ-4** Applicants for new residential development projects within the Planning Area that are subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects) and that exceed the SCAQMD significance thresholds during operations shall, prior to issuance of a building permit for new development projects within the Planning Area, indicate on the building plans that the feature below has been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Carson Department of Building and Safety prior to issuance of a certificate of occupancy.

- For multi-family dwellings, electric vehicle charging shall be provided as specified in Section A4.106.8.2 (Residential Voluntary Measures) of the CALGreen Code (or its successor code).

**MM AQ-5** Applicants for new non-residential development projects within the Planning Area that are subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects) and that SCAQMD significance thresholds during operations shall, prior to

issuance of a building permit for new development projects within the Planning Area, indicate on the building plans that the features below have been incorporated into the design of the building(s). Proper installation of these features shall be verified by the City of Carson Department of Building and Safety prior to issuance of a certificate of occupancy.

- Preferential parking for low-emitting, fuel-efficient, and carpool/van vehicles shall be provided as specified in Section A5.106.5.1 (Nonresidential Voluntary Measures) of the CALGreen Code (or its successor code).

- Facilities shall be installed to support future electric vehicle charging at each nonresidential building with 30 or more parking spaces. Installation shall be consistent with Section A5.106.5.3 (Nonresidential Voluntary Measures) of the CALGreen Code (or its successor code).

**MM AQ-6** Applicants for new development projects within the Planning Area that are subject to CEQA review (i.e., non-exempt projects) and are within one-quarter mile (1,320 feet) of a sensitive land use shall, prior to issuance of a building permit, submit a construction-related air quality study that evaluates potential localized project construction-related air quality impacts to the City of Carson Planning Department for review and approval. The evaluation shall be prepared in conformance with SCAQMD methodology for assessing localized significance thresholds (LST) air quality impacts. If construction-related criteria air pollutants are determined to have the potential to exceed for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

**MM AQ-7** Applicants for new development projects within the Planning Area that are subject to CEQA review (i.e., non-exempt projects) and are within one-quarter mile (1,320 feet) of a sensitive land use shall, prior to issuance of a building permit, submit a construction-related air quality study that evaluates potential health risk impacts to the City of Carson Planning Department for review and approval. The evaluation shall be prepared in conformance with SCAQMD methodology for assessing health risk impacts. If health risk impacts are determined to have the potential to exceed the SCAQMD-adopted thresholds of significance, the City shall require that applicants for new development projects incorporate mitigation measures to reduce air pollutant emissions during construction activities. These identified measures shall be incorporated into all appropriate construction documents (e.g., construction management plans) submitted to the City and shall be verified by the City's Planning Department.

### 3.3.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

#### *(a) Would the Project conflict with or obstruct implementation of the applicable air quality plan?*

The 2022 AQMP is the most recently adopted AQMP by SCAQMD. The response to Checklist Question 3.3.1(a) identifies the two key indicators of AQMP consistency.

### *Construction*

**Control Strategies**. As discussed below under the response to Checklist Question 3.3.2(c), localized emissions of $NO_2$ (as $NO_X$), CO, $PM_{10}$, and $PM_{2.5}$ have been analyzed for the Project in accordance with the SCAQMD LST methodology. Due to California Low Sulfur Diesel Fuel requirements, air quality violations involving $SO_2$ are no longer a concern in the SCAB except in extremely rare cases associated with large-scale industrial operations. As discussed in the response to Checklist Question 3.3.2(b), below, $SO_X$ emissions would be negligible during construction of development associated with the Modified Project and, therefore, would not have the potential to cause or affect a violation of the $SO_2$ ambient air quality standard.

Since VOCs are not a criteria pollutant, there is no ambient standard or localized mass daily threshold for VOC emissions. Due to the role VOCs play in $O_3$ formation, they are classified as a precursor pollutant and only a regional emissions threshold has been established. The Project's maximum potential $NO_X$, CO, $PM_{10}$, and $PM_{2.5}$ daily emissions during construction were analyzed to determine potential effects on localized concentrations and to determine if there is a potential for such emissions to cause or affect a violation of an applicable ambient air quality standard. As discussed in the response to Checklist Question 3.2.2(c), below, localized $NO_2$ (as $NO_X$), CO, $PM_{10}$, and $PM_{2.5}$ would not exceed SCAQMD-recommended LST screening values.

Contractors will be required to ensure that construction of the Specific Plan elements would be conducted in accordance with best management practices (BMPs) provided in SCAQMD Regulation IV, Rule 401 (Visible Emissions) and Rule 403 (Fugitive Dust). Based on fugitive dust experiments conducted in real-world conditions, CalEEMod documentation indicates that the application of water as a dust suppressant to material stockpiles and disturbed ground areas would reduce fugitive dust emissions during construction activities by approximately 76 percent.[4] Furthermore, all construction equipment and vehicles would be maintained and operated within manufacturer specifications to limit unnecessary emissions during use, and any vehicles traveling on unpaved surfaces would be required to limit their speed to 15 miles per hour or less, which would reduce suspended $PM_{10}$ dust emissions by 57 percent relative to vehicles traveling at 35 miles per hour. Idling of any off-road equipment or on-road vehicles would be constrained to no more than five minutes in any one location in accordance with Section 2485 in Title 13 of the California Code of Regulations. Additionally, with full statewide implementation of the Truck and Bus Regulation taking effect in January 2023, all heavy-duty hauling and delivery trucks are required to comply with 2010 USEPA emissions standards.

As discussed in the responses to Checklist Questions 3.3.2(b) and 3.3.2(c), maximum daily emissions would remain below the corresponding threshold values for all pollutants. Therefore, construction of the Modified Project would not increase the frequency or severity of existing air quality violations, would not contribute to new violations, and would not delay the timely attainment of the NAAQS or CAAQS. Construction of the Modified Project would be consistent with the AQMP under the first indicator.

**Growth Projections.** Construction of the Modified Project would not have any direct or indirect impacts on the long-term population and employment growth projections that are utilized in developing the AQMP emissions inventory and forecasting. It is anticipated that contractors would source construction crews from the existing regional workforce, and that construction of the Modified Project would not require additional construction employees to relocate to the City. Therefore, construction associated with the Modified Project would not conflict with the long-term

[4]Countess Environmental, *Western Regional Air Partnership (WRAP) Fugitive Dust Handbook*, September 2006.

employment or population projections upon which the AQMP is based. Construction of the Modified Project would be consistent with the AQMP under the second indicator.

***Operation***

**Control Strategies**. None of the land uses associated with the Modified Project would involve substantial sources of air pollutant emissions that would have the potential to create or exacerbate air quality violations within Los Angeles County. The proposed bus depot would accommodate buses operated by Long Beach Transit, which operates 250 buses as of late 2025. Their bus fleet is comprised of 44 battery-electric buses (BEB), 81 gasoline-hybrid electric buses, and 125 compressed natural gas (CNG) buses. Since 2020, the agency has only purchased zero-emission buses and has committed to implementing an entirely zero-emission fleet by 2030. Thus, the Modified Project would not include a source or sources of emissions that could result in new or exacerbated air quality violations.

As discussed in the response to Checklist Question 3.3.2(b), below, $SO_X$ emissions would be negligible during long-term operations of the Modified Project and, therefore, would not have the potential to cause or affect a violation of the $SO_2$ ambient air quality standard.

Regarding mobile source emissions, while long-term operation of the Modified Project uses would add traffic to local roads and intersections, the additional traffic would not result in exceedances of CO air quality standards in the area due to three key factors. First, CO hotspots are extremely rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to the general area surrounding the Project Site. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology in the vehicle fleet, such that the aggregate average emission rates have decreased substantially since the 1992 CO hotspot analysis that was included as a supplemental technical appendix for the 2003 AQMP documentation. Finally, the Modified Project would not contribute to the levels of congestion that would be needed to produce emissions concentrations needed to trigger a CO hotspot. As discussed in the 2003 AQMP, the 1992 CO Plan included a CO hotspot analysis at four intersections in the peak A.M. and P.M. time periods, including Long Beach Boulevard and Imperial Highway (Lynwood), Wilshire Boulevard and Veteran Avenue (Westwood), Sunset Boulevard and Highland Avenue (Hollywood), and La Cienega Boulevard and Century Boulevard (Inglewood). The busiest intersection was Wilshire and Veteran, used by 100,000 vehicles per day. The 2003 AQMP estimated a 4.6 ppm one-hour concentration at this intersection, which meant that an exceedance (20 ppm) would not occur until daily traffic exceeded more than 400,000 vehicles per day.

Based on traffic circulation analysis prepared for this Addendum, the maximum P.M. peak hour intersection volume under existing conditions is approximately 4,385 vehicles per hour at the Avalon Boulevard/Carson Street intersection. Extrapolating the daily intersection volume using an assumption that 10 percent of traffic occurs during the highest peak hour, this represents a maximum of approximately 43,850 vehicles per day, which is less than one-ninth of the volume that could have caused potentially significant air quality conditions in the attainment demonstration year of 2003. The traffic distribution analysis for the Modified Project assessed the forecasted intersection volumes in the horizon year of 2050. The maximum peak hour vehicle volume forecasted in the analysis was 4,820 vehicles per hour at the Avalon Boulevard/Carson Street intersection, and the maximum incremental increase in peak hour vehicle volumes relative to the Future Without Project scenario was an additional 230 vehicles at the intersection of Bonita Street and Carson Street.

Extrapolating the maximum peak hour intersection volume of 4,820 vehicles per hour to a daily metric, approximately 48,200 vehicles would traverse the Avalon Boulevard/Carson Street intersection in the horizon year of 2050. This traffic volume represents approximately 12 percent of

the amount of traffic that could have yielded a CO hotspot air quality violation based on the 2003 attainment demonstration, without accounting for improvements in emission reduction technologies. There is no possibility for future operations associated with the Modified Project to increase daily traffic volumes at surrounding intersections such that enough congestion would be created that a CO hotspot may result. Considering the improvements in vehicle technologies that have reduced CO emission rates for on-road vehicles, Modified Project operations would have no potential to cause air quality violations related to CO concentrations at nearby intersections.

Operational activities associated with the Modified Project would not increase the frequency or severity of existing air quality violations, would not cause or contribute to new violations, and would not delay the timely attainment of AAQS or interim emissions reductions within the AQMP. Therefore, operation of the Modified Project would be consistent with the AQMP under the first indicator.

**Growth Projections.** The 2022 AQMP is the most recently adopted AQMP for the SCAB region. The basis for the population, housing, and employment projections in the 2022 AQMP are from the City of Carson General Plan and SCAG RTP/SCS. The 2020–2045 RTP/SCS provides socioeconomic forecast projections of regional population growth. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on local plans and policies. The 2020–2045 RTP/SCS accounted for a total of 105,200 persons, 30,700 households, and 70,000 jobs in the City by 2045. The projection for the citywide Service Population, which comprises the residents and employees combined, was approximately 175,200 in the horizon year of 2045.

On April 4, 2024, SCAG adopted the 2024–2050 RTP/SCS with an updated growth projection that accounted for 100,200 persons, 31,400 households, and 62,300 jobs in the City by 2050. The Service Population was, therefore, forecasted to be 162,500 in 2050, which is approximately 12,700 fewer persons than the prior RTP/SCS projection for 2045. Once the 2022 AQMP is updated with these growth forecasts, consistency with the projections in the applicable air quality plan for the region will be based on the 2024-2050 RTP/SCS. However, the fact that the 2050 Service Population forecast in the 2024–2050 RTP/SCS is lower than the 2045 Service Population forecast in the prior RTP/SCS suggests that additional growth could be accommodated within the City without rendering the assumptions built into the 2022 AQMP emissions inventory inaccurate. Regional modeling prepared to support this Addendum estimated that the citywide 2050 Service Population with implementation of the Modified Project would be 170,325 in 2050, which is lower than the 2022 AQMP citywide Service Population assumption of 175,200 in 2045. Therefore, the Modified Project would be consistent with the population and employment growth projections that were built into the 2022 AQMP attainment demonstration. Operation of the Modified Project would be consistent with the AQMP under the second indicator.

With regard to land use composition, the AQMP's air quality policies focus on the reduction of vehicle trips and VMT. The Modified Project would implement a number of land use policies of the City, SCAQMD, and SCAG, as it would be designed and constructed to support and promote environmental sustainability. The Modified Project is an infill development within an urbanized area that would concentrate more housing and population in close proximity to destination centers. The Modified Project would create a quality walking experience through improving pedestrian connectivity to support new development and would also encourage the use of active transportation and public transit.

Renovation of the existing City Hall and Community/Event Center would not change the nature of the land uses currently present on the Project Site. New development under the Modified Project would comply with the 2025 Carson Building Code which incorporates the standards set in the 2025 California Green Building Standards Code (CalGreen, effective January 1, 2023). Energy efficiency

and sustainability features would include native plants and drip/subsurface irrigation systems, individual metering or sub-metering for water use in the mixed-use housing, leak detection systems, Energy Star appliances, and electric vehicle charging capacity.

**Consistency with General Plan Update Policies.** The City's General Plan Update Open Space and Environmental Conservation Element and Community Health and Environmental Justice Element identify 12 policies with specific strategies for advancing the City's clean air goals. As illustrated in **Table 3-1**, the Modified Project is consistent with the applicable policies in the General Plan Update as the Modified Project would implement sustainability features that would reduce vehicular trips, reduce VMT, and encourage the use of alternative modes of transportation. Therefore, the Modified Project would be consistency with the General Plan Update as it pertains to air quality.

**TABLE 3-1: CONSISTENCY WITH GENERAL PLAN UPDATE AIR QUALITY POLICIES**

| Policy | Project Consistency |
|---|---|
| **OPEN SPACE AND ENVIRONMENTAL CONSERVATION ELEMENT** | |
| **Policy OSEC-G-17**: Support regional efforts to reduce pollution from significant sources that negatively affect the City, such as port and truck pollution from the ports of Los Angeles and Long Beach. | **Not Applicable.** This policy calls for the City to coordinate with SCAQMD and other entities to reduce mobile and stationary sources of air pollution from the ports and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such advocacy. |
| **Policy OSEC-G-18**: Continue to work with SCAQMD to reduce generation of air pollutants, improve air quality, and meet all national and State ambient air quality standards. | **Not Applicable.** This policy calls for the City to coordinate with SCAQMD on policies that will help achieve clean air standards and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would advance the City's objectives for creating denser and walkable neighborhoods that promote alternative transportation and reduce air quality emissions. |
| **Policy OSEC-G-19**: Seek to reduce mobile sources of air pollution by creating denser and walkable neighborhoods, promoting transit-oriented development, and improving bicycle infrastructure, with the goal to reduce the number of miles traveled in cars and improve regional air quality. | **Consistent.** The proposed development would advance the City's objectives for creating denser and walkable neighborhoods that promote alternative transportation and reduce air quality emissions. In turn, the Project Site is well-served by public transit, including LA Metro bus stops along Avalon Boulevard and Long Beach Transit stops on Carson Street and Avalon Boulevard on the western and southern edges of the Project Site. |
| **Policy OSEC-G-20**: Seek to reduce air quality impacts of industrial and commercial uses, like oil refineries and trucking, for both mobile and stationary sources of pollution. | **Not Applicable.** Thie Modified Project and its Entertainment Retail Option would not include industrial and commercial uses that produce substantial mobile and stationary source missions. |
| **Policy OSEC-G-21**: Lessen exposure of sensitive uses to pollutants emitted by mobile sources by buffering freeways, major arterials, and truck routes with trees and vegetation. | **Consistent.** The Modified Project and its Entertainment Retail Option would buffer new residents in the mixed-used housing development by locating the structure in the northwest portion of the Project Site, approximately 800 feet from I-405. Additionally, new street trees would be installed, which would serve as a barrier for road dust from surrounding streets. |
| **Policy OSEC-G-22**: Promote clean and alternative fuel combustion in City-owned mobile equipment and vehicles. | **Not Applicable.** This policy calls for the City to promote clean fuel technology in its vehicle fleets. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such a policy and would include a bus depot with infrastructure to accommodate the Long Beach Transit bus fleet's transition to zero-emission vehicles by 2030. |

| TABLE 3-1: CONSISTENCY WITH GENERAL PLAN UPDATE AIR QUALITY POLICIES | |
|---|---|
| **Policy** | **Project Consistency** |
| **COMMUNITY HEALTH AND ENVIRONMENTAL JUSTICE ELEMENT** | |
| **Policy CHE-G-2**: Reduce air pollution and the incidence of respiratory illness through the land use planning process. | **Not Applicable.** This policy calls for the City to use land use policy to reduce air pollution and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such a policy. |
| **Policy CHE-G-3**: Proactively coordinate City air quality improvement activities with the SCAQMD and other regional programs, as well as with neighboring communities. | **Not Applicable.** This policy calls for the City to coordinate with SCAQMD and other entities on air pollution reduction activities and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such advocacy. |
| **Policy CHE-G-4**: Protect community health from pollution by toxics and hazardous materials, especially in areas with vulnerable or sensitive populations. | **Not Applicable.** This policy calls for the City to use land use policy to protect community health and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such a policy. |
| **Policy CHE-P-5**: Continue to enforce zoning and design standards that protect sensitive uses from the encroachment of land uses that would result in impacts from noxious fumes or toxins. | **Not Applicable.** This policy calls for the City to use land use policy and code enforcement to protect community health and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such a policy. |
| **Policy CHE-G-6**: Collaborate with SCAQMD to coordinate policies that reduce air pollution from local sources and implement programs that leverage funding from Senate Bill (SB) 535, Assembly Bill (AB) 1550, AB 617, and other sources to improve air quality and public health. | **Not Applicable.** This policy calls for the City to coordinate with SCAQMD and other entities to coordinate state, regional, and local policies and is not applicable to development projects. Nevertheless, the Modified Project and its Entertainment Retail Option would not inhibit such advocacy. |
| **Policy CHE-G-8**: Avoid new toxin sources by stringently evaluating the siting of facilities that might significantly increase pollution, especially near already disproportionately impacted communities. | **Not Applicable.** The Modified Project and its Entertainment Retail Option does not include industrial or other uses that emit toxins. |
| **SOURCE:** TAHA, 2025. | |

### *Summary*

The Modified Project would be consistent with the AQMP under the first and second indicators. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### Entertainment Retail Option

Construction of the Entertainment Retail Option would not result in an extension of the duration of activities and would not require additional equipment or vehicle use beyond the reasonably conservative assumptions utilized in the air quality analysis discussed above for the Modified Project. All of the same regulatory provisions would apply to the Entertainment Retail Option, and the replacement of the hotel use with an entertainment retail center would not materially change the types or magnitudes of air pollutant sources that would be present on the Project Site. Under the Entertainment Retail Option, the citywide service population would be marginally higher than the Modified Project, forecasted to be 170,511 combined residents and employees in the horizon year of 2050. This service population would remain below the growth projections that were incorporated into the assumptions for the attainment demonstration within the 2022 AQMP and would not render its conclusions invalid. The Entertainment Retail Option is consistent with the

AQMP. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?***

SCAB has ongoing significant cumulative impact conditions for $O_3$, $PM_{10}$, and $PM_{2.5}$ since the region is designated as nonattainment of the CAAQS and NAAQS for these air pollutants. A cumulatively considerable net increase would occur if a project's emissions substantially contribute to air quality violations when considering other projects that may be developed concurrently. To address the nuance that is involved in assessing cumulative impacts, SCAQMD published guidance in a White Paper to assist in the preparation of CEQA analyses.[5] Individual projects whose estimated maximum daily emissions do not exceed SCAQMD's significance thresholds would not contribute considerably to any potential cumulative impact. Per the SCAQMD, "Projects that exceed the project-specific significance threshold are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are not considered to be cumulatively significant." SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to assess the impacts associated with these emissions.

**Construction Emissions.** Emissions that would be generated during construction of the Modified Project were estimated using the California Emissions Estimator Model (CalEEMod, Version 2022.1), which was developed by the California Air Pollution Control Officers Association in collaboration with various air districts throughout the state, primarily the SCAQMD. **Table 3-2** provides an overview of the emissions sources that are quantified by CalEEMod for construction of land use development projects.

**TABLE 3-2: CALEEMOD CONSTRUCTION EMISSIONS SOURCES**

| Phase Type(s) | Activity | Source(s) | Pollutants |
|---|---|---|---|
| All Phases | Off-Road Equipment Use | Engine Exhaust | VOC, $NO_X$, CO, $SO_X$, $PM_{10}$, $PM_{2.5}$ |
| All Phases | On-Road Vehicle Trips | Engine Exhaust | VOC, $NO_X$, CO, $SO_X$, $PM_{10}$, $PM_{2.5}$ |
| All Phases | On-Road Vehicle Trips | Engine Evaporative Losses | VOC |
| All Phases | On-Road Vehicle Trips | Brake & Tire Wear | $PM_{10}$, $PM_{2.5}$ |
| All Phases | On-Road Vehicle Trips | Re-Entrained Road Dust | $PM_{10}$, $PM_{2.5}$ |
| Demolition | Structure Demolition | Fugitive Dust | $PM_{10}$, $PM_{2.5}$ |
| Demolition, Site Clearing, Grading | Truck Loading | Fugitive Dust | $PM_{10}$, $PM_{2.5}$ |
| Site Clearing, Grading | Ground Disturbance | Fugitive Dust (Dozers/Graders) | $PM_{10}$, $PM_{2.5}$ |
| Building Construction | Paving | Off-Gassing (Evaporation) | VOC |
| Building Construction | Architectural Coating | Off-Gassing (Evaporation) | VOC |

**SOURCE**: CAPCOA, 2022.

[5] South Coast Air Quality Management District, *2003 White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution*, https://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper.pdf

Equipment and vehicle activity inventories that would be required to construct the Modified Project were developed using reasonably conservative assumptions. The construction schedule for development associated with the Modified Project is currently unknown. Construction on the different uses, open space areas, and street enhancements Modified Project could either occur at different times or occur simultaneously. As a conservative approach, it was assumed that different activities would occur simultaneously on separate portions of the 20-acre site. Although construction activities could occur at various times throughout the 25-year timeframe after specific development plans for each development on the Project Site are prepared and finalized, construction of the Modified Project is assumed to begin in mid-2026 and be completed by mid-2028, for a total of up to 25 months.

**Table 3-3** summarizes the construction schedule and equipment and vehicle activities that were used to prepare the emissions modeling. The overlapping phases included demolition and site preparation, grading/excavation and building renovation/construction, and ongoing building renovation/construction with paving and design elements/landscaping. In the bottom portion of **Table 3-3**, the maximum daily on-site equipment uses and maximum daily on-road vehicle trips that would occur during the overlapping scenarios are also presented. For the crew and truck trips, the values presented represent round trips (i.e., two one-way trips for each).

**TABLE 3-3: MODIFIED PROJECT CONSTRUCTION ASSUMPTIONS**

| Phase | Approx Start | Approx End | Duration (Months) | # Daily Equipment | Daily Crew | Daily Delivery Trips | Daily Disposal Trips |
|---|---|---|---|---|---|---|---|
| Demolition | 06/2026 | 08/2026 | 3 | 16 | 80 | 2 | 60 |
| Site Preparation / Utilities | 08/2026 | 10/2026 | 3 | 11 | 80 | 8 | 80 |
| Excavation / Grading | 11/2026 | 4/2027 | 6 | 15 | 100 | 4 | 120 |
| Renovation / Construction | 02/2027 | 06/2028 | 16 | 33 | 200 | 120 | 40 |
| Hardscape / Sidewalks/Roads | 03/2028 | 06/2028 | 3 | 16 | 80 | 20 | 4 |
| Painting/Signage / Landscaping | 01/2028 | 06/2028 | 6 | 10 | 80 | 40 | 4 |
| ***Concurrent Activities Parameters*** | | | | | | | |
| Demolition + Site Preparation / Utilities | | | | 27 | 160 | 10 | 140 |
| Grading/Excavation + Building Renovation / Construction | | | | 48 | 300 | 124 | 160 |
| Reno/Construction + Paving + Design Elements / Landscaping | | | | 59 | 360 | 180 | 48 |

**SOURCE**: TAHA, 2025.

Importantly, the maximum daily trips provided for the individual phases, as well as the overlapping phases, would not occur every day throughout the construction period. Preparing the regional emissions analysis using these conservative assumptions represents an unlikely scenario, but the approach was chosen to be as protective as possible in identifying potentially significant impacts. Additionally, the construction contractor(s) would be required to comply with the following regulations, as applicable:

- SCAQMD Rule 403: outlines Best Management Practices (BMPs) to be adhered to for reducing the amount of fugitive dust generated by ground-disturbing equipment, vehicle travel on unpaved or partially paved roads, uncovered material stockpiles, and material hauling activities.

- SCAQMD Rule 1113: provides limits to the VOC content of architectural coatings, traffic coatings, and other applicators.
- SCAQMD Rule 402: prevents the discharge of air contaminants or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.
- Section 2485 in Title 13 of the California Code of Regulations: limits the maximum duration of idling for all diesel-fueled commercial vehicles to no more than five minutes at any location.
- Section 93115 in Title 17 of the California Code of Regulations: any stationary, diesel-fueled, compression-ignition engines (i.e., generators) are required to meet specific fuel and fuel-additive requirements.

**Table 3-4** presents the SCAQMD mass daily air quality significance thresholds for regional emissions of regulated pollutants that would result from construction and operational activities for individual development projects.[6] Regional emissions refer to all emissions that would be associated with construction and operation of a project, including mobile source emissions that occur off-site. The mass daily thresholds were derived using regional emissions modeling techniques to prevent the occurrence of air quality violations that would obstruct implementation of the AQMP and hinder efforts to improve regional air quality. SCAQMD generally advises that a project generating maximum daily pollutant emissions that are of lesser magnitude than the corresponding regional threshold values shown in **Table 3-4** would not cause a significant air quality impact at the regional level. If maximum daily emissions exceed applicable threshold values during construction or operations, opportunities to mitigate and reduce those emissions are required to be explored and implemented as feasible.

**TABLE 3-4: SCAQMD REGIONALSIGNIFICANCE THRESHOLDS – MASS DAILY EMISSIONS**

| | Pounds per Day | | | | | |
|---|---|---|---|---|---|---|
| **Pollutant** | **VOC** | **$NO_X$** | **CO** | **$SO_X$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Regional Construction Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| Regional Operational Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **SOURCE**: SCAQMD, 2023 | | | | | | |

**Table 3-5** presents the maximum daily emissions that would be generated during each construction activity. Maximum daily emissions during construction are compared to the applicable SCAQMD mass daily regional thresholds of significance. As mentioned above, the regional analysis considers overlapping phases of construction that may be performing different activities on distinct areas of the 20-acre Project Site, and the emissions are assessed from the approach of characterizing the maximum possible daily emissions, even if that scenario is highly unlikely to occur in practicality.

As shown in **Table 3-5**, construction of the Modified Project would not generate daily emissions of ozone-precursors or criteria pollutants in excess of any SCAQMD regional thresholds. Therefore, construction of the Modified Project would not result in cumulatively considerable net increases in emissions of any nonattainment pollutants (i.e., ozone-precursors or PM). The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[6] SCAQMD, *South Coast AQMD Air Quality Significance Thresholds – Mass Daily Thresholds*, March 2023.

**TABLE 3-5: ESTIMATED MAXIMUM DAILY REGIONAL CONSTRUCTION EMISSIONS**

| Construction Phase/Activity | Maximum Daily Emissions (Pounds Per Day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| Demolition | 4.2 | 42.7 | 44.1 | 0.1 | 8.7 | 3.5 |
| Site Preparation & Utilities | 3.0 | 35.4 | 35.4 | 0.1 | 8.6 | 3.2 |
| Excavation & Grading | 3.4 | 41.3 | 43.8 | 0.2 | 9.7 | 3.0 |
| Building Renovation and Construction | 6.1 | 54.6 | 72.4 | 0.2 | 10.8 | 3.5 |
| Hardscapes, Sidewalks, and Road Paving | 2.7 | 19.7 | 33.0 | 0.1 | 3.8 | 1.3 |
| Painting, Signage, and Landscaping | 60.5 | 11.8 | 21.5 | 0.1 | 3.2 | 1.0 |
| **CONCURRENT ACTIVITY EMISSIONS** | | | | | | |
| Demolition + Site Preparation/Utilities | 7.2 | 78.1 | 79.5 | 0.2 | 17.3 | 6.7 |
| Excavation/Grading + Building Reno/Con | 9.5 | 95.9 | 116.2 | 0.4 | 20.5 | 6.5 |
| Reno/Con + Paving + Accents/Landscaping | 69.3 | 86.1 | 126.9 | 0.4 | 17.8 | 5.8 |
| **Maximum Daily Emissions** | **69.3** | **95.9** | **126.9** | **0.4** | **20.5** | **6.7** |
| Regional Significance Threshold | 75 | 100 | 550 | 150 | 150 | 55 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |

Note: Emissions modeling files can be found in **Appendix A**.
**SOURCE:** TAHA, 2025.

**Operational Emissions.** Following the completion of construction activities, future operation of the Modified Project would generate emissions through area, energy, on-site equipment, and mobile source categories. Area sources comprise consumer products—which refer to chemically formulated products used by households and institutional consumers—such as household cleaners and personal care products, landscaping equipment, and the off-gassing from the re-application of architectural and other coatings during refinishing and maintenance activities. The energy source category estimates emissions from natural gas use in building operations, and it was assumed that several small forklifts would regularly be in operation to handle deliveries to the hotel and retail/restaurant uses. Emissions from these on-site sources were estimated in CalEEMod and are summarized in **Table 3-6**, below.

Regarding mobile source (on-road vehicle) emissions, due to the nature of the Modified Project being a Specific Plan, the transportation analysis assessed how daily citywide VMT would be affected with its implementation rather than just analyzing the land use-specific trip generation. Emissions associated with citywide vehicle travel under existing conditions and with implementation of the Modified Project in 2050 were estimated using the VMT data and aggregate average regional emission rates CARB's EMission FACtor (EMFAC2021) mobile source emissions inventory database. The difference in daily citywide mobile source emissions was added to the on-site emissions to characterize the long-term operational effects of implementing the Modified Project, as shown in **Table 3-6**.

**TABLE 3-6: ESTIMATED DAILY REGIONAL OPERATIONAL EMISSIONS – MODIFIED PROJECT**

| | Maximum Daily Emissions (Pounds Per Day) | | | | | |
|---|---|---|---|---|---|---|
| **Operational Source Category** | **VOC** | **$NO_X$** | **CO** | **$SO_X$** | **$PM_{10}$** | **$PM_{2.5}$** |
| **ON-SITE EMISSIONS** | | | | | | |
| Area Sources | 31.0 | 0.6 | 70.0 | <0.1 | 0.1 | 0.1 |
| Energy Sources | 0.4 | 7.1 | 5.8 | <0.1 | 0.5 | 0.5 |
| Off-Road Equipment | 0.3 | 2.5 | 6.1 | <0.1 | <0.1 | <0.1 |
| **Total On-Site Emissions** | **31.7** | **10.2** | **81.9** | **<0.1** | **0.7** | **0.7** |
| **CITYWIDE VMT EMISSIONS – MODIFIED PROJECT COMPARED TO EXISTING CONDITIONS** | | | | | | |
| Modified Project Emissions (2050) | 299.7 | 562.3 | 3,257.3 | 13.6 | 124.3 | 43.6 |
| Existing Conditions Emissions | 731.7 | 1,096.3 | 7,106.9 | 20.3 | 139.8 | 52.8 |
| **Net Change in Mobile Source Emissions** | **-431.9** | **-534.1** | **-3,849.6** | **-6.7** | **-15.5** | **-9.2** |
| **Daily Operational Emissions – Change from Existing Conditions** | **-400.2** | **-523.9** | **-3,767.7** | **-6.6** | **-14.8** | **-8.5** |
| Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |
| **CITYWIDE VMT EMISSIONS – MODIFIED PROJECT COMPARED TO FUTURE WITHOUT MODIFIED PROJECT CONDITIONS** | | | | | | |
| Modified Project Emissions (2050) | 299.7 | 562.3 | 3,257.3 | 13.6 | 124.3 | 43.6 |
| Future Site without Modified Project (2050) | 299.0 | 560.8 | 3,249.0 | 13.5 | 124.0 | 43.5 |
| **Net Change in Mobile Source Emissions** | **0.7** | **1.5** | **8.3** | **0.1** | **0.3** | **0.1** |
| **Daily Operational Emissions** | **32.4** | **11.7** | **90.2** | **0.2** | **1.0** | **0.8** |
| Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Note:** Emissions modeling files can be found in **Appendix A**.
**SOURCE:** TAHA, 2025.

Consistent with the Certified EIR, the comparison of operational emissions is made to existing conditions. Daily emissions of all pollutants would decrease with implementation of the Modified Project in 2050 relative to existing conditions. For informational purposes, a comparison of operational emissions for the Modified Project and the future Project Site without its implementation in 2050 is also provided in **Table 3-7**. When using the same horizon year of analysis for both scenarios, daily operational emissions would still remain below the SCAQMD regional thresholds for all pollutants. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### Entertainment Retail Option

Regarding cumulatively considerable increases in nonattainment pollutant emissions, construction of the Entertainment Retail Option would be completed within a similar timeframe and generate similar quantities of emissions to those disclosed for the Modified Project. Construction of the Entertainment Retail Option would not require additional off-road equipment activities or on-road vehicle trips beyond the reasonably conservative assumptions that were utilized to develop the analysis for the Modified Project.

**Table 3-7** presents a summary of the estimated operational emissions that would occur with implementation of the Entertainment Retail Option in the horizon year of 2050. As shown below, results of the analysis are similar to the Modified Project, and the conclusions of the impact analysis are the same. Neither construction nor operation of the Project Option would result in new or exacerbated impacts involving cumulatively considerable increase in nonattainment pollutant emissions. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-7: ESTIMATED DAILY REGIONAL OPERATIONAL EMISSIONS – ENTERTAINMENT RETAIL OPTION**

| Operational Source Category | Maximum Daily Emissions (Pounds Per Day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_X$ | CO | $SO_X$ | $PM_{10}$ | $PM_{2.5}$ |
| **ON-SITE EMISSIONS** | | | | | | |
| Area Sources | 32.0 | 0.7 | 79.0 | <0.1 | 0.1 | 0.1 |
| Energy Sources | 0.4 | 6.5 | 5.3 | <0.1 | 0.5 | 0.5 |
| Off-Road Equipment | 0.3 | 2.5 | 6.1 | <0.1 | <0.1 | <0.1 |
| **Total On-Site Emissions** | **32.7** | **9.7** | **91.4** | **<0.1** | **0.7** | **0.7** |
| **CITYWIDE VMT EMISSIONS** | | | | | | |
| Modified Project Emissions (2050) | 300.2 | 563.1 | 3,262.4 | 13.6 | 124.5 | 43.7 |
| Existing Conditions Emissions | 731.7 | 1,096.3 | 7,106.9 | 20.3 | 139.8 | 52.8 |
| **Net Change in Mobile Source Emissions** | **-431.5** | **-533.2** | **-3,844.5** | **-6.7** | **-15.3** | **-9.1** |
| **Net Daily Operational Emissions** | **-398.8** | **-523.5** | **-3,753.1** | **-6.6** | **-14.6** | **-8.4** |
| Regional Threshold | 55 | 55 | 550 | 150 | 150 | 55 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** | **No** | **No** |

**Note:** Emissions modeling files can be found in **Appendix A**.
**SOURCE:** TAHA, 2025.

### *(c) Would the Project expose sensitive receptors to substantial pollutant concentrations?*

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following groups who are most likely to be affected by air pollution: children less than 14 years of age, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to SCAQMD, sensitive receptors include residences, schools, playgrounds, childcare centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. A survey of the surrounding land uses was completed to identify sensitive receptors in the project area.

The SCAQMD LST methodology recommends that the localized analysis should consider sensitive receptors up to 1,640 feet (500 meters) from the Project Site.[7] However, the highest pollutant concentrations would occur at receptor locations in closest proximity to the source activity. Therefore, it is the minimum distance to a sensitive receptor that is used to determine the appropriate LST screening values for use in the localized impact analysis.

[7] SCAQMD, *Final Localized Significance Threshold Methodology*, July 2008.

The closest sensitive receptors to the Project Site boundaries are:

- Single-family residences on the south side of Desford Street along the northeastern edge of the Project Site;
- Bel-Aire Park, a mobile home community located across Avalon Boulevard to the west, approximately 100 feet from the western edge of the Project Site boundary;
- Union South Bay Apartments, a mixed-use apartment complex located across Avalon Boulevard to the west, approximately 115 feet from the western edge of the Project Site boundary;
- The Gateway, a mixed-use apartment complex located across Carson Street to the south, approximately 100 feet from the southern edge of the Project Site boundary; and
- Park Avalon Mobile Estates, a mobile home community located across Carson Street to the south, approximately 100 feet from the southern edge of the Project Site boundary.

The LST screening values were derived using receptor distances in meters because that is the default distance unit used in the air dispersion modeling program to determine the maximum daily emissions that would not result in ground-level concentrations exceeding the ambient air quality standards. The shortest distance for which LST screening values were established is 25 meters, or approximately 83 feet.[8] The single-family residences along the south side of Desford Street are less than 83 feet from the Project Site boundary and, therefore, the corresponding LST screening values were used in the localized analysis.

SCAQMD relied on background concentrations of pollutants measured at monitoring sites throughout its jurisdiction in combination with the modeled concentrations to establish the LST screening values. The SCAQMD jurisdiction is divided into source receptor areas (SRAs) with boundaries drawn based on the monitoring site locations and local topography and meteorological conditions. The Project Site is located within SRA 4: South Coastal Los Angeles County. The applicable LST screening values for sites in SRA 4 that have sensitive receptors within 25 meters of the boundary are summarized in **Table 3-8**, below. For the construction analysis, the appropriate site size is based on the area of ground disturbance that would occur on a daily basis, and for operations, it encompasses the entirety of the Project Site.[9] The assessment of potential impacts involves comparing the maximum daily emissions of $NO_X$, CO, $PM_{10}$, and $PM_{2.5}$ that would be generated by sources located on the Project Site throughout construction and during future operations to the applicable LST screening values. If the screening values are not exceeded, no further analysis is warranted. If one or more of the screening values is exceeded, a more thorough analysis involving air dispersion modeling, and potentially the incorporation of mitigation measures, may be required.

[8] SCAQMD, *Final Localized Significance Threshold Methodology Appendix C Mass Rate Lookup Tables*, October 21, 2009.

[9] SCAQMD, *Fact Sheet for Applying CalEEMod to Localized Significance Thresholds*, February 2011.

**TABLE 3-8: SCAQMD LOCALIZED SIGNIFICANCE THRESHOLDS FOR PROJECT SITE – MASS DAILY EMISSIONS**

| | Pollutant Emissions (Pounds per Day) | | | |
|---|---|---|---|---|
| **Size of Site (Acres) /a/** | **$NO_X$** | **CO** | **$PM_{10}$** | **$PM_{2.5}$** |
| **LOCALIZED CONSTRUCTION THRESHOLDS** | | | | |
| 1 | 57 | 585 | 4 | 3 |
| 2 | 82 | 842 | 7 | 5 |
| 3 (Interpolated) | 95 | 1,071 | 9 | 6 |
| 5 | 123 | 1,530 | 14 | 8 |
| **LOCALIZED OPERATIONAL THRESHOLD** | | | | |
| >5 (Total Site) | 123 | 1,530 | 4 | 2 |

**Note:** Construction LSTs were selected for a ground disturbance area within 25 meters of sensitive land uses in SRA 4.

/a/ Construction LST is based on the area of ground disturbance that would occur on a daily basis, which would vary depending on the type of uses that would be constructed at a given time for the Modified Project. Operational LST is based on the entire Project Site.

**SOURCE**: SCAQMD, 2009.

### *Construction*

Construction of the Modified Project could expose sensitive receptors to substantial pollutant concentrations if maximum daily emissions of regulated pollutants generated by sources located on and/or near the Project Site exceeded the applicable LST values presented in **Table 3-4**, or if construction activities generated significant emissions of TACs that could result in carcinogenic risks or non-carcinogenic hazards exceeding the SCAQMD Air Quality Significance Thresholds of 10 excess cancers per million or non-carcinogenic Hazard Index greater than 1.0, respectively. As discussed above, the LST values were derived by SCAQMD for the criteria pollutants $NO_X$, CO, $PM_{10}$, and $PM_{2.5}$ to prevent the occurrence of concentrations exceeding the air quality standards at air quality sensitive receptor locations based on proximity and size of the construction site.

**Criteria Pollutants.** As described previously, CalEEMod was used to generate reasonably conservative estimates of the maximum daily emissions that would occur during construction of the Modified Project. Sources that would be active on the Project Site include off-road equipment and on-site trucks for dust control and concrete/asphalt pouring. Fugitive dust emissions would be associated with ground-disturbing equipment (i.e., dozers and graders), on-site vehicle travel, uncovered material stockpiles, and demolition activities. All of these sources are accounted for in the CalEEMod analysis. **Table 3-9**, below, presents the maximum daily emissions that would be generated by on-site sources during each phase of the construction process, as well as for phases that could be occurring simultaneously on different areas of the Project Site.

The localized analysis provided in the bottom portion of **Table 3-9** compares the maximum daily emissions to the corresponding LST screening values for a one-acre, two-acre, and three-acre ground disturbance area based on the equipment inventory specific to each phase (or combined phases). As shown in the table, maximum daily unmitigated emissions from on-site sources would not exceed the LST screening values for any of the four pollutants. Furthermore, contractors hired to construct the Modified Project would be required to comply with SCAQMD Rules 401 (Visible Emissions) and 403 (Fugitive Dust), which would minimize the amount of dust generated during the various activities. They would also adhere to requirements set forth in the California Code of Regulations related to diesel-fueled equipment and vehicle idling and fuel additive restrictions.

**TABLE 3-9: LOCALIZED EMISSIONS ANALYSIS OF CRITERIA POLLUTANTS – MODIFIED PROJECT**

| Construction Activity | Daily Acres Disturbed | Maximum Daily Emissions (Pounds Per Day) | | | |
|---|---|---|---|---|---|
| | | $NO_X$ | CO | $PM_{10}$ | $PM_{2.5}$ |
| Demolition | 2 | 32.1 | 30.1 | 4.2 | 2.2 |
| Site Preparation & Utilities | 1 | 20.1 | 21.1 | 3.2 | 1.7 |
| Excavation & Grading | 2 | 20.1 | 24.1 | 2.3 | 0.9 |
| Building Renovation & Construction | 1 | 38.1 | 42.1 | 1.9 | 1.2 |
| Hardscapes, Sidewalks, and Road Paving | 1 | 17.1 | 23.1 | 1.1 | 0.6 |
| Painting, Signage, and Landscaping | 0 | 7.9 | 11.0 | 0.2 | 0.2 |
| **CONCURRENT ACTIVITY EMISSIONS** | | | | | |
| Demolition + Site Preparation/Utilities | 3 | 52.2 | 51.2 | 7.4 | 3.9 |
| Excavation/Grading + Building Reno/Con | 3 | 58.2 | 66.2 | 4.2 | 2.1 |
| Reno/Con + Paving + Accents/Landscaping | 2 | 63.1 | 76.2 | 3.2 | 2.0 |
| **Maximum Daily Emissions: 1-acre Disturbance** | | **38.1** | **42.1** | **3.2** | **1.7** |
| Localized Significance Threshold (1-acre) | | 57 | 585 | 4 | 3 |
| **Maximum Daily Emissions: 2-acre Disturbance** | | **63.1** | **76.2** | **4.2** | **2.2** |
| Localized Significance Threshold (2-acre) | | 82 | 842 | 7 | 5 |
| **Maximum Daily Emissions: 3-acre Disturbance** | | **58.2** | **66.2** | **7.4** | **3.9** |
| Localized Significance Threshold (3-acre, Interpolated) | | 95 | 1,071 | 9 | 6 |
| **Exceed Threshold(s)?** | | **No** | **No** | **No** | **No** |

Note**:** Emissions modeling files can be found in **Appendix A**.
**SOURCE:** TAHA, 2025.

**Mitigation Measure MM AQ-6** from the Certified EIR would continue to apply to the Modified Project. This mitigation measure requires applicants for new development projects that are subject to CEQA review and are within one-quarter mile of a sensitive land use submit a construction-related air quality study that evaluates potential localized project construction-related air quality impacts to the City's Planning Department for review and approval. If construction-related criteria air pollutants are determined to have the potential to exceed the SCAQMD significance thresholds, the City would require applicants of new development projects to incorporate mitigation measures to reduce air pollutant emissions during construction activities. As required by **Mitigation Measure MM AQ-6** from the Certified EIR, the air quality analysis presented this section of the Addendum (i.e., Section 3.3, Air Quality), which has been prepared in conformance with SCAQMD methodology, would be reviewed and is subject to the approval of the City's Planning Department and the City Council. As discussed and presented in the air quality analysis of the Addendum, construction of the Modified Project would not have the potential to exceed the SCAQMD LST thresholds for construction and, thus, no mitigation measures are required for the Modified Project beyond those identified in the Certified EIR.

In summary, nearby air quality sensitive receptors would not have the potential to be exposed to substantial concentrations of $NO_X$, CO, or PM during construction of the Modified Project. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Toxic Air Contaminants.** The primary TAC that would be emitted during construction activities is diesel PM, which would be released in the exhaust from off-road construction equipment and diesel-fueled water- and concrete/asphalt-dispensing trucks. Diesel PM is a known carcinogen, and

extended exposures to elevated concentrations of diesel PM can increase excess cancer risks in individuals. Health effects from carcinogenic air toxics are characterized in terms of excess incremental individual cancer risk. "Individual Cancer Risk" is the likelihood that a person continuously exposed to TAC concentrations over an extended period of time will contract cancer based on the use of dose-response risk assessment methodology. In most cases, carcinogenic risk is assessed over 30 years of exposure or longer, such as for someone living near an industrial facility or a heavily trafficked highway. Construction-related health risk assessments are not typically required under the purview of CEQA for standard land use development projects, and there are no established criteria for determining whether one is necessary.

Given the size of the Project Site, the particular locations of diesel-fueled equipment and truck activities would vary substantially on a daily basis throughout the construction period, and those sources would only be active in close proximity to nearby sensitive receptors for a fraction of the construction duration. Compliance with Airborne Toxic Control Measure 2485 to limit diesel vehicle idling to no more than five minutes at any one location would minimize excess diesel PM emissions. Emissions would be distributed across the construction site where equipment is active and would be dispersed quickly due to the elevated atmospheric mixing height and higher wind speeds during the daytime. It is unlikely that diesel PM concentrations would reach levels of any public health concern at air quality sensitive receptor locations in the Project Site vicinity during the construction period, and diesel PM emissions would cease upon completion of construction activities.

**Mitigation Measure MM AQ-7** from the Certified EIR would continue to apply to the Modified Project. This mitigation measure requires applicants for new development that are subject to CEQA review and are within one-quarter mile of a sensitive land use submit a construction-related air quality study that evaluates potential health risk impacts to the City's Planning Department for review and approval. If construction-related health risks would have the potential to exceed SCAQMD-adopted thresholds of significance, the City would require applicants of new development projects to incorporate mitigation measures to reduce air pollutant emissions during construction activities. The air quality analysis presented this section of the Addendum (i.e., Section 3.3, Air Quality), which has been prepared in conformance with SCAQMD methodology, would be reviewed and is subject to the approval of the City's Planning Department and the City Council. As explained above, construction of the Modified Project would not have the potential reach levels that would cause any public health concerns at air quality sensitive receptor locations and, thus, no mitigation measures are required for the Modified Project beyond those identified in the Certified EIR.

In summary, construction of the Modified Project is unlikely to result in any public health risks at air quality sensitive receptor locations in the Project Site vicinity. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### *Operation*

None of the land uses proposed for the Modified Project involve operations that are associated with substantial pollutant emissions and would not introduce a substantial source of TAC emissions to the Project Site. As shown in **Table 3-10**, below, operational emissions from on-site sources would remain substantially below the applicable localized thresholds for $NO_X$, CO, $PM_{10}$, and $PM_{2.5}$. The land uses associated with the Modified Project would also generally be consistent with the surrounding land use composition and would not bring diesel-fueled vehicle traffic in closer proximity to sensitive receptors. Therefore, operation of the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-10: ESTIMATED DAILY LOCALIZED OPERATIONAL EMISSIONS – MODIFIED PROJECT**

| | Maximum Daily Emissions (Pounds Per Day) | | | |
|---|---|---|---|---|
| **Operational Source Category** | **$NO_X$** | **CO** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area Sources | 0.6 | 70.0 | 0.1 | 0.1 |
| Energy Sources | 7.1 | 5.8 | 0.5 | 0.5 |
| Off-Road Equipment | 2.5 | 6.1 | <0.1 | <0.1 |
| **Total On-Site Emissions** | **10.2** | **81.9** | **0.7** | **0.7** |
| SRA 4 Operational LST Screening Values | 123 | 1,530 | 4 | 2 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** |

**Note:** Emissions modeling files can be found in **Appendix A**.
**SOURCE:** TAHA, 2025.

## Entertainment Retail Option

The assessment of potential impacts related to sensitive receptor exposures for the Entertainment Retail Option follows the same approach as the Modified Project. Replacing the hotel use with an entertainment retail development would not introduce a new substantial source of air pollutant emissions to the Project Site, and construction emissions would be essentially the same as those analyzed above in **Table 3-11**. **Mitigation Measures MM AQ-6** and **MM AQ-7** from the Certified EIR would continue to apply to construction of the Entertainment Retail Option. Since the Entertainment Retail Option would not have the potential to exceed the SCAQMD LST thresholds for construction, no mitigation measures beyond those identified in the Certified EIR are required for the Entertainment Retail Option.

During future operation of the Entertainment Retail Option, maximum daily emissions from on-site sources would remain substantially below the applicable SCAQMD LST screening values, as demonstrated by the analysis provided in **Table 3-11**, below. Therefore, construction and operation of the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-11: ESTIMATED DAILY LOCALIZED OPERATIONAL EMISSIONS – ENTERTAINMENT RETAIL OPTION**

| | Maximum Daily Emissions (Pounds Per Day) | | | |
|---|---|---|---|---|
| **Operational Source Category** | **$NO_X$** | **CO** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area Sources | 0.7 | 79.0 | 0.1 | 0.1 |
| Energy Sources | 6.5 | 5.3 | 0.5 | 0.5 |
| Off-Road Equipment | 2.5 | 6.1 | <0.1 | <0.1 |
| **Total On-Site Emissions** | **9.7** | **91.4** | **0.7** | **0.7** |
| SRA 4 Operational LST Screening Values | 123 | 1,530 | 4 | 2 |
| **Exceed Threshold?** | **No** | **No** | **No** | **No** |

**Note:** Emissions modeling files can be found in **Appendix A**.
**SOURCE:** TAHA, 2025.

***(d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people***

Odors are the only potential construction and operational emissions other than the sources addressed in the response to Checklist Questions 3.3.2(a) through 3.3.2(c) that has the potential to adversely affect a substantial number of people. SCAQMD air quality significance thresholds address odorous emissions by invoking compliance with SCAQMD Rule 402. A significant air quality impact would occur if construction or operation of the Modified Project creates a public nuisance condition in violation of SCAQMD Rule 402.

***Construction.*** During construction, potential sources that may produce objectionable odors include equipment exhaust, application of asphalt and architectural coatings, and other interior and exterior finishes. Odors from these sources would be localized and generally confined to the immediate area surrounding the Project Site, would be temporary in nature, and would not persist beyond the termination of construction activities. The Modified Project would utilize typical construction techniques, and odors would be typical of most construction sites. Odors from construction activities would decrease, dissipate away from the construction area, and be quickly diluted. The particular locations construction equipment would vary substantially on a daily basis throughout the construction period, and it is anticipated that construction equipment would only be operating near sensitive land uses on an intermittent basis, and during times of the day when residents are less likely to be home. These factors would limit the possibility of nuisance-causing odors from affecting a substantial number of people during construction of the Modified Project. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***Operations.*** Land uses and industrial operations that are associated with odor complaints generally include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding.[10] The Modified Project does not include land uses that are typically associated with odor complaints. Additionally, operations of the Modified Project would comply with SCAQMD Rule 402, which prohibit any air quality discharge that would be a nuisance or pose any harm to individuals of the public. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The analysis of potential impacts involving public nuisances related to air quality for the Entertainment Retail Option is congruent with the discussion provided above for the Modified Project. Construction and operation of the entertainment retail center in lieu of the hotel would not introduce a new source of potentially bothersome odors or dust to the Project Site under future operations. The Entertainment Retail Option would not include land use that is typically associated with substantial sources of odors such as a rendering facility, dry cleaner, or waste processing facility. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.3.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

[10] SCAQMD, *CEQA Air Quality Handbook*, 1993.

### 3.3.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.3.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

**Mitigation Measures MM AQ-1** through **MM AQ-5** from the Certified EIR are applicable to development projects that are subject to CEQA review and exceed SCAQMD significance thresholds. As presented in the air quality analysis in Section 3.3.2, above, the Modified Project and its Entertainment Retail Option would not exceed any of the SCAQMD significance thresholds. Therefore**, Mitigation Measures MM AQ-1** through **MM AQ-5** from the Certified EIR would not apply to the Modified Project or the Entertainment Retail Option.

**Mitigation Measures MM AQ-6** and **MM-AQ-7** from the Certified EIR would continue to apply to the Modified Project and its Entertainment Retail Option since the Modified Project and its Entertainment Retail Option are subject to CEQA review and are within one-quarter mile of sensitive land uses. The localized construction-related air quality analysis presented in the response to Checklist Question 3.3.2(c), above, was conducted in conformance with SCAQMD methodology for assessing localized impacts. As discussed, construction of the Modified Project and its Entertainment Retail Option would not have the potential to exceed the SCAQMD LST thresholds and would not have the potential to cause any public health concerns at air quality sensitive receptors. Thus, no mitigation measures are required for the Modified Project or the Entertainment Retail Option.

### 3.3.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.4 BIOLOGICAL RESOURCES

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **BIOLOGICAL RESOURCES**. Would the project: | | | | | |
| (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | Less Than Significant | No | No | No | Yes |
| (b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | Less Than Significant | No | No | No | No |
| (c) Have a substantial adverse effect on state or federally-protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | No Impact | No | No | No | No |
| (d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | Less Than Significant | No | No | No | Yes |
| (e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | No Impact | No | No | No | No |
| (f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | No Impact | No | No | No | No |

## 3.4.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

#### *Construction*

**Special-Status Plants.** The Certified EIR concluded that special-status plant species (Southern Tarplant) has been recorded within the Planning Area, where future development allowed by the General Plan Update could directly or indirectly impact this biological resource. As anticipated by

the buildout of the General Plan Update, construction of some projects could result in direct removal of Southern Tarplant. This species has a high potential to occur within the Planning Area (particularly along both banks of the Dominguez Channel on either side of I-110, north of I-405), and future projects would have potential to impact Southern Tarplant on a project-by-project basis due to specific on-site conditions, which could result in a potentially significant impact.

However, construction of all future projects facilitated under the General Plan Update would be required to comply with the General Plan Update policies listed below. Specifically, Guiding Policy OSEC-G-4 would require future projects under the General Plan Update to identify any special-status plants located within a future project's area of effect that are state or federally listed as Endangered, Threatened, or Rare, which would help to reduce significant impacts to special-status species within the Planning Area. While implementation of the General Plan Update policies would help to reduce impacts to special-status plants due to construction of future projects under the General Plan Update, all future projects would also be required to comply with all applicable laws, regulations, and ordinances related to special-status plants. All project sites that have been identified as supporting special-status plants would be required to comply with the California Endangered Species Act and/or the Federal Endangered Species Act through their regulatory permitting processes. The specific compensatory mitigation measures required to take a listed plant or to eliminate its habitat would be determined at the time of permitting prior to construction of the project. The compensatory mitigation measures would likely include habitat restoration and/or preservation, relocation of on-site special-status plants, and/or purchase of credits at a mitigation bank or in lieu fee program.

Although compliance with the General Plan Update policies and applicable laws and regulations would help to minimize impacts to special-status plants, project-specific mitigation measures **(MM BIO-1** through **MM BIO-3)** have also been incorporated to ensure that impacts to special-status plants would be reduced to a less than significant level on a project-by-project basis. The mitigation measures listed below would require future projects developed under the General Plan Update to implement procedures and processes related to protecting special-status plants, such as preconstruction surveys, transplantation, agency coordination and implementation of an environmental awareness program related to special-status plants. Implementation of the mitigation measures would ensure that the impact to special-status plants with construction of future projects under the General Plan Update would be less than significant.

**Special-Status Wildlife.** The Certified EIR concluded that three special-status wildlife species (Tricolored Blackbird, Least Bell's Vireo and the Western Mastiff Bat) have potential to occur within the Planning Area, where future development allowed by the General Plan Update could directly or indirectly impact these biological resources. Adverse impacts on wildlife are generally associated with the degree of habitat loss including a habitat's physical character, quality, and diversity, in addition to abundance of vegetation. As anticipated by the buildout of the General Plan Update, construction of some projects could result in direct removal of wildlife habitat, resulting in the potential mortality of wildlife species existing on-site as well as the displacement of more mobile species to suitable habitat areas nearby. While these biological resources have a low potential to occur within the Planning Area due to the heavily developed nature of the Planning Area, future projects would have potential to impact these resources on a project-by-project basis due to specific on-site conditions, which could result in potentially significant impacts.

However, construction of all future projects facilitated under the General Plan Update would be required to comply with the General Plan Update policies listed below. Specifically, Guiding Policy OSEC-G-4 would require future projects under the General Plan Update to monitor for wildlife migration routes and identify any special-status wildlife species located within a future project's area of effect that are state or federally listed as Endangered, Threatened, or Rare, which would help to reduce significant impacts to special-status species within the Planning Area.

While implementation of the General Plan Update policies would help to reduce impacts to biological resources due to construction of future projects under the General Plan Update, all future projects would also be required to comply with all applicable laws, regulations, and ordinances related to special-status wildlife. All project sites that have been identified as supporting special-status wildlife would be required to comply with the California Endangered Species Act and/or Federal Endangered Species Act through their regulatory permitting processes. The specific compensatory mitigation measures required to take a listed wildlife species or to eliminate its habitat would be determined at the time of permitting prior to construction of the project. The compensatory mitigation measures would likely include habitat restoration and/or preservation, purchase of mitigation bank or in lieu fee program credits, and/or limitations regarding the extent and timing of construction.

Although compliance with General Plan Update policies and applicable laws and regulations would help to minimize impacts to special-status wildlife, project-specific mitigation measures (**MM BIO-4** through **MM BIO-9**) have also been incorporated to ensure that impacts to special-status wildlife would be reduced to a less than significant level on a project-by-project basis. The mitigation measures listed below would require future projects developed under the General Plan Update to implement procedures and processes related to protecting special-status wildlife, such as preconstruction surveys, compensatory mitigation ratios for loss of designated habitats, and protection and/or avoidance of special-status wildlife. Implementation of the mitigation measures would ensure that the impact to special-status wildlife with construction of future projects under the General Plan Update would be less than significant.

**Nesting Birds.** The Certified EIR concluded that nesting birds and/or nesting bird habitat have been recorded within the Planning Area, where future development allowed by the General Plan Update could directly or indirectly impact these biological resources. The Planning Area consists of trees, shrubs, and ground cover that could be used by breeding raptors and songbirds. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA) and nests and eggs are protected by Fish and Game Code, Section 3503. While these biological resources have a low potential to occur due to the heavily developed nature of the Planning Area, future projects would have potential to impact these resources on a project-by-project basis if removal of active nests or harassment of a breeding bird occur during construction, which could result in a potentially significant impact. Construction of all future projects facilitated under the General Plan Update would be required to comply with the General Plan Update policies listed below. Specifically, Guiding Policies OSEC-G-3 and OSEC-G-5 and Implementing Policies OSECP-5 and OSEC-P-7 would aim to enhance and expand the City's urban forest canopy, which in turn would increase available nesting bird habitat throughout the Planning Area. In addition to the General Plan Update policies listed below, future applicants would also be required to comply with MBTA, which would further reduce impacts to nesting birds.

Although compliance with General Plan Update policies and MBTA would help to minimize impacts to nesting birds and their associated habitat, project-specific mitigation measures **(MM BIO-4** through **MM BIO-6**) have also been incorporated to ensure that impacts to nesting birds would be reduced to a less than significant level on a project-by-project basis. The mitigation measures listed below would require future projects developed under the General Plan Update to implement procedures and processes related to protecting nesting birds and their associated habitat, such as preconstruction surveys and protection and/or avoidance of nesting birds and their associated habitats. Implementation of the mitigation measures would ensure that the impact to nesting birds with construction of future projects under the General Plan Update would be less than significant

### *Operations*

**Special-Status Plants.** The Certified EIR concluded that operation of future projects facilitated under the General Plan Update could include routine landscaping and maintenance, which could have the potential to adversely impact special-status plants. Potential adverse impacts may result from introducing non-native or invasive plant species into areas that support special-status plant species and could result in invasive species outcompeting these natives for water, nutrients, and sunlight. However, future projects would be required to comply with the General Plan Update policies, which support efforts to increase biodiversity of plant species by creating new natural habitats (Guiding Policy OSEC-G-3) or reclaiming natural habitats in heavily disturbed areas within the Planning Area (Implementing Policy OSEC-P-4). Furthermore, implementation of **Mitigation Measure MM BIO-2** would require future applicants to prepare a special-plants planting plan, if applicable, to ensure that adequate conditions, species, and monitoring are implemented within restored and/or preserved areas throughout operation of the project. Through compliance with General Plan Update policies and incorporation of this mitigation measure, the impact to special-status plants during operation would be reduced to a less than significant level.

**Special-Status Wildlife.** The Certified EIR concluded that operation of future projects developed under the General Plan Update could result in adverse impacts to special-status wildlife due to the removal and/or change in existing habitats, increased vehicular traffic and a corresponding increase in noise and threat of roadkill by traffic; an increase in human presence in preserved or open space areas; an increase in predatory and feral pets; an increase in litter, pollutants, dust, oil, and other human debris; and an increase in nighttime light trespass onto preserved open space. All of the General Plan Update policies listed below aim to help improve the conditions of the existing natural habitat and the associated species that utilize those habitats. However, to ensure that the operational impact to special-status wildlife associated with future projects is reduced to a less than significant level, future project applicants would be required to incorporate and implement **Mitigation Measures MM BIO-4** through **MM BIO-9**, as applicable.

**Nesting Birds.** The Certified EIR concluded that operation of future projects developed under the General Plan Update could result in adverse impacts to nesting birds due to the removal and/or change in existing habitats, increased vehicular traffic and a corresponding increase in noise and threat of road kill by traffic; an increase in human presence in preserved or open space areas; an increase in predatory and feral pets; an increase in litter, pollutants, dust, oil, and other human debris; and an increase in nighttime light trespass onto preserved open space. All of the General Plan Update policies listed below aim to help improve the conditions of the existing natural habitat and the associated species that utilize those habitats. However, to ensure that the operational impact to nesting birds associated with future projects are reduced to a less than significant level, future project applicants would be required to incorporate and implement **Mitigation Measures MM BIO-4** through **MM BIO-6**, as applicable.

***(b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The Certified EIR concluded that riparian habitat has been documented in the Planning Area in the Dominguez Channel, Dominguez Branch Channel, Wilmington Drain, and in the Carson Harbor Village Mobile Home Park, which contains approximately 17 acres of wetlands protected by deed restrictions. These riparian areas within the Planning Area are not ideal locations to construct new development as they are either being used for regional infrastructure or are protected in perpetuity. USFWS designated critical habitat for listed plant or wildlife species does not occur within the Planning Area. In addition, sensitive natural communities have also been recorded within the

Planning Area, which includes Southern Dune Scrub, Southern Foredunes, Southern Coastal Salt Marsh, and Southern Coastal Bluff Scrub. While these areas have not been identified as locations for new development, maintenance activities or improvements to these areas could result in impacts to these riparian habitats and/or sensitive natural communities.

A quantification of potential impacts on riparian or other sensitive natural communities cannot be made until the design and nature of specific projects is known. As a general rule, the removal and/or fragmentation of sensitive natural communities identified by the California Department of Fish and Wildlife (CDFW) would be considered to be potentially significant due to their decline in the region and/or their suitability as habitat for sensitive species. In particular, the loss and/or fragmentation of riparian alliances and most native shrubland and scrub alliances could adversely affect rare, endangered, or threatened plant and wildlife species. Therefore, removal and/or fragmentation of these habitats would be considered a significant impact.

With buildout of the General Plan Update, development of some projects could result in direct removal or indirect impacts to the identified sensitive natural communities or riparian habitat depending on the location and scale of future projects. However, construction of all future projects facilitated under the General Plan Update would be required to comply with the General Plan Update policies listed below Specifically, Guiding Policy OSEC-G-4 would require future projects under the General Plan Update to recognize and support the preservation of wildlife migration routes and special-status species that are state or federally listed as Endangered, Threatened, or Rare, which would help to reduce significant impacts to sensitive natural communities or riparian habitats within the Planning Area. In addition, all future projects would also be required to comply with all applicable laws, regulations, and ordinances related to sensitive natural communities and riparian habitat to ensure all obligatory protocols and/or measures are undertaken to protect these resources. Although compliance with General Plan Update policies and applicable laws and regulations would help to minimize impacts to sensitive natural communities, project-specific mitigation measures listed below were also incorporated to ensure that impacts to sensitive natural communities and riparian habitat would be reduced to a less than significant level on a project-by-project basis. Implementation of the mitigation measures listed below would ensure that the impact to sensitive natural communities and riparian habitat with development of future projects under the General Plan Update would be less than significant.

***(c) Would the Project have a substantial adverse effect on state or federally-protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means***

Within the Planning Area, wetlands have been identified within the Carson Harbor Village Mobile Home Park, which contains approximately 17 acres of wetlands protected by deed restrictions. Since these wetlands are protected by deed restrictions for perpetuity, no development or changes may occur within the wetlands boundaries. The only other wetland area documented within the Planning Area is the 17-acre Bixby Marshland, owned and operated by the Los Angeles County Sanitation Districts (LACSD). Consequently, development under the General Plan Update would not have the potential to impact federally or state-protected wetlands through direct removal, filling, hydrologic interruption, or by other means. Therefore, no impact would occur related to adversely affecting federally or state-protected wetlands.

***(d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

Limited wildlife movement is expected within the Planning Area due to the prevalence of developed areas and lack of native habitats. However, particularly within the riparian woodland communities,

these communities may support movement on a smaller or "local" scale for species of invertebrates, amphibians, reptiles, birds, and small-to-medium mammals, primarily those with high urban tolerance. The home range of many of these species may be entirely contained within the isolated patches of riparian woodland habitat remaining within the City. However, on a larger regional scale, movement is not expected except for some limited movement along the improved, channelized waterways that may attract avian species and urban-adapted wildlife following these aquatic resources to areas where patches of habitat may be present.

A quantification of potential impacts on riparian or other sensitive natural communities cannot be made until the design and nature of specific projects is known. As a general rule, the removal and/or fragmentation of sensitive natural communities identified by the CDFW would be considered to be potentially significant due to their decline in the region and/or their suitability as habitat for sensitive species. With buildout of the General Plan Update, operation of some projects could result in indirect impacts to the identified riparian habitat depending on maintenance and improvement activities. However, operation and maintenance of all future projects facilitated under the General Plan Update would be required to comply with the General Plan Update policies listed below. Specifically, Guiding Policy OSEC-G-4 requires future projects under the General Plan Update to monitor for wildlife migration routes and identify special-status species that are state or federally listed as Endangered, Threatened, or Rare, which would help to reduce significant impacts to riparian habitats within the Planning Area. In addition, all future projects would also be required to comply with all applicable laws, regulations, and ordinances related to sensitive natural communities and riparian habitat to ensure all obligatory protocols and/or measures are undertaken to protect these resources.

Although compliance with the General Plan Update policies and the applicable laws and regulations would help to minimize impacts to riparian habitat, implementation of the General Plan Update could result in the potential removal and/or fragmentation of existing riparian habitat within the Planning Area, thus, resulting in a potentially significant impact.

***(e) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

Implementation of the General Plan Update will not introduce any potential conflicts with the existing City of Carson Tree Preservation and Protection Ordinance or the Los Angeles County Oak Tree Protection Ordinance, which applies to the City's SOI. Development of future projects facilitated under the General Plan Update would be subject to the City and County's tree preservation ordinances, as applicable, which include adherence to tree management and trimming procedures. In addition, General Plan Update policies would help promote a strong urban forest across public and private properties (Guiding Policy OSEC-G-5 and Implementing Policy OSEC-P-5) and would enhance tree health and appearance of streets and other public spaces through regular maintenance, as well as tree and landscaping planting and care of the existing canopy (Implementing Policy OSEC-P-6). Future project's consistency with these policies would further ensure impacts to tree resources would be minimized. Therefore, no impact associated with creating a conflict with a tree preservation policy or ordinance would occur.

***(f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

Due to the lack of biological resources and heavily developed nature of the Planning Area, there are no Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans adopted for the Planning Area. For this reason, development of future projects under the General Plan Update would not conflict or interfere with

an adopted habitat conservation plan. While the presence of biological resources is relatively limited within the Planning Area, General Plan Update policies aim to protect and enhance the few biological resources within the Planning Area, as listed in the response to Checklist Question 3.4.1, above. Therefore, no impact related to creating a conflict with a habitat conservation plan would occur.

**General Plan Update Policies that Address Biological Resources**

***Open Space and Environmental Conservation Element***

*Guiding Policies*

OSEC-G-3 Support efforts to improve the biodiversity of plant and animal habitats within Carson by creating natural habitat areas when feasible. Support efforts to restore channelized creeks to naturalized flows, with supportive open space development that promotes healthy riparian habitat.

OSEC-G-4 Recognize and support the preservation of wildlife migration routes and special status species that are state or federally listed as Endangered, Threatened, or Rare.

OSEC-G-5 Promote ecology and avian habitat creation by supporting a strong urban forest.

*Implementing Policies*

OSEC-P-4 Support reclamation of natural habitat in heavily disturbed locations, including closed landfills, channels, and when industrial areas are redeveloped, to improve the biodiversity of the City, increase resident's access to nature and outdoor recreation, restore plant and animal habitat, and assist with environmental remediation. This policy is intended to bring more greenery into the City and seeks to improve biological resources with reducing environmental impacts, such as the heat island affect, improve air quality, assist with environmental remediation, and further environmental justice initiatives.

OSEC-P-5 Recognize the importance of the urban forest to the natural environment in Carson and support the expansion of the tree canopy on public and private property throughout the community.

OSEC-P-6 Enhance tree health and the appearance of streets and other public spaces through the regular maintenance as well as tree and landscaping planting and care of the existing canopy.

OSEC-P-7 Provide awareness among property owners, businesses, and developers of larger sites that may undergo redevelopment or sites located along creeks that may be naturalized about the possibilities for environmental improvement, such as landscape, maintenance and irrigation practices that foster habitat creation for wildlife species and improve the urban forest.

**Mitigation Measures**

**MM BIO-1** **Preconstruction Focused Survey for Special-Status Plants**. Prior to initiating disturbance activities for individual projects that are subject to California Environmental Quality Act (CEQA) review (i.e., non-exempt projects), a focused survey for special-status plant species shall be performed by a qualified biologist(s) within the boundaries of the future project area, including all on-and off-site impact areas. If any special-status plants are found, a qualified biologist(s) with a California Department of Fish and Wildlife Scientific Collection Permit shall prepare a plan to relocate these species to suitable habitats within surrounding public open space areas

that would remain undisturbed. For those species that cannot be physically transplanted, the biologist(s) shall collect seeds from the plants. To the extent feasible, the preconstruction focused survey shall be completed when species are in bloom, typically between May and November.

**MM BIO-2** **Special-Status Plants Planting Plan**. Prior to initiating disturbance activities for individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and that have the potential to cause direct or indirect impacts on special-status plants, a qualified biologist(s) shall prepare a Special-Status Plants Planting Plan for the species to be transplanted. At a minimum, the plan shall include 1) a description of the existing conditions at the project site, including any on- or off-site impact areas, and receiver sites, 2) methods to transplant and/or collect seed for off-site planting and/or seeding, 3) a two-year monitoring program, including performance standards, 4) description of and/or figure showing plant spacing, and 5) long-term maintenance requirements, including a funding mechanism to support long-term maintenance activities. The City shall also require proof that the plan preparer consulted with U.S. Fish and Wildlife Service (USFWS) and/or California Department of Fish and Wildlife (CDFW) personnel or a qualified botanist in order to maximize transplanting success.

**MM BIO-3** **Listed Endangered and Threatened Plant Agency Coordination**. For individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and would impact state or federally listed plants, in addition to **MM BIO-1** and **-2**, the City shall require the project applicant to provide documentation of the U.S. Fish and Wildlife Service (USFWS) or California Department of Fish and Wildlife (CDFW) authorizing take of listed plants or concurring the project would not be likely to result in an adverse effect on the species. The federal Endangered Species Act does not address listed plants on private property unless some type of federal action is involved. If a federal action is required for a project (e.g., federal funding, Clean Water Act compliance), a consultation between the lead federal agency and the USFWS must be completed. Under the California Endangered Species Act, Section 2081 subdivision (b) of the Fish and Game Code allows CDFW to authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met.

**MM BIO-4** **Preconstruction Surveys for Special-Status Wildlife**. For individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and are found to contain suitable habitat for special-status wildlife species (including surrounding areas within 300 feet of the site), no earlier than three weeks prior to initiating disturbance activities, focused surveys for special-status wildlife species shall be completed by a qualified biologist(s) within the boundaries of the future project, including all on-and off-site impact areas. If any special-status wildlife species are found, a qualified biologist(s) with a California Department of Fish and Wildlife (CDFW) Scientific Collection Permit shall prepare a plan to relocate these species to suitable habitats within surrounding public open space areas that would remain undisturbed, unless the biologist determines that such relocation cannot reasonably be accomplished at which point CDFW will be consulted regarding whether relocation efforts should be modified or terminated. The relocation plan, including relocation methods (e.g., trap and release) and proposed receiver sites shall be approved by the CDFW prior to relocating any wildlife. If relocation is determined to not be a feasible option, the project applicant shall propose other form(s) of compensatory mitigation (e.g., off-site habitat restoration and/or preservation,

payment into an existing restoration program, or providing funds to another City-approved conservation program).

**MM BIO-5** **Listed Endangered or Threatened Wildlife Habitat Assessment**. Prior to approval of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and may impact potentially suitable habitat for federally or state listed endangered or threatened species, the City shall require a habitat assessment to be completed by a qualified biologist(s) well versed in the requirements of the species in question. If no suitable habitat for the listed species is identified within 300 feet of construction or maintenance activities, no further measures would be required in association with the project. If suitable habitat for the species is identified within 300 feet of such activities, prior to construction, the City shall require that a focused survey be completed by a qualified biologist(s) for the species in accordance with protocols established by the U.S. Fish and Wildlife Service and/or California Department of Fish and Wildlife. In the event a state or federal listed species is determined to occupy habitat located in the proposed project site or within 300 feet of the site, the CDFW and/or USFWS shall be consulted, as required by the California Endangered Species Act and/or federal Endangered Species Act. In order to address and acknowledge the potential for listed species to occur within the Planning Area or be impacted by future development projects, this assessment acknowledges future actions by state and federal resource agencies in addition to the analyses necessary and required under CEQA.

**MM BIO-6** **Nesting Bird Surveys**. All vegetation clearing for construction and fuel modification for individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) shall occur outside of the breeding bird season (February 1 and August 31), if feasible, to ensure that no active nests would be disturbed unless clearing and/or grading activities cannot be avoided during that time period. If clearing and/or grading activities for individual projects cannot be avoided during the breeding season, all suitable habitats shall be thoroughly surveyed for the presence of nesting birds by a qualified biologist(s) no earlier than three weeks prior to initiating disturbance activities. Suitable nesting habitat within the Planning Area include ornamental landscaping trees and shrubs, mixed-riparian woodland, and non-native woodland communities. If any active nests are detected, the area shall be flagged along with a 300-foot buffer for song birds and a 500-foot buffer for raptorial birds (or otherwise appropriate buffer as determined by the surveying biologist), and shall be avoided until the nesting cycle is complete or it is determined by the surveying biologist that the nest is no longer active.

**MM BIO-7** **Use of Buffers Near Active Bat Roosts**. During the November 1 to March 31 hibernation season, disturbance activities for individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) shall not be conducted within 100 feet of woodland habitat that provides suitable bat roosting habitat. Bat presence is difficult to detect using emergence surveys during this period due to decreased flight and foraging behavior. If a qualified biologist who is highly familiar with bat biology determines woodland areas do not provide suitable hibernating conditions (for example, cavities in the trunk or branches, woodpecker holes, loose bark, cracks, splits and thick ivy) and therefore, bats are unlikely to be present in the area, work may commence as planned.

**MM BIO-8** **Bat Maternity Roosting Surveys**. Prior to approval of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., nonexempt projects) and may impact potentially suitable habitat for bats, the City shall require a bat maternity roosting survey. No earlier than three weeks prior to initiating disturbance activities, a nighttime evening emergence survey and/or internal searches within large tree cavities shall be conducted by a qualified biologist who is highly familiar with bat biology during the maternity season (April 1 to August 31) to determine presence/absence of bat maternity roosts in wooded habitat in the project site or surrounding areas within 300 feet of the project site. All active roosts identified during the survey shall be protected by a buffer width to be determined by a qualified biologist. The buffer will be determined by the type of bat observed, topography, slope, aspect, surrounding vegetation, sensitivity of roost, type of potential disturbance, etc. Each buffer would remain in place until the end of the maternity roosting season. If no active roosts are identified, then work may commence as planned. Survey results are valid for 30 days from the survey date. Should work commence later than 30 days from the survey date, then additional surveys shall be conducted prior to starting the work.

**MM BIO-9** **Bat Roosting Replacement**. All bat roosts that are permanently lost due to an individual project that is subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) must be documented via submission to the California Natural Diversity Data Base by the project's designated biologist and shall be replaced at a 1:1 ratio on- or off-site with a roost suitable for the displaced species (e.g., bat houses for colonial roosters). The design of such replacement habitat shall be coordinated with the California Department of Fish and Wildlife. Each new roost shall be in place prior to the time that the bats are expected to use the roosts as determined by a qualified biologist who is highly familiar with bat biology and shall be monitored annually for two to five years to ensure proper roosting habitat characteristics (e.g., suitable temperature and no leaks). The roost shall be modified as necessary to provide a suitable roosting environment for the target bat species.

**MM BIO-10** **Sensitive Natural Communities**. To mitigate potential impacts on sensitive woodland, shrubland and scrub natural communities provided a California Department of Fish and Wildlife state sensitivity rank of S1 to S3, future projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) shall implement the following mitigation measures prior to any ground disturbance:

- If avoidance cannot be reasonably accomplished, impacts to any S1 to S3 categorized shrubland, scrub or woodland alliance shall be mitigated through on- or off-site restoration, enhancement and/or preservation. For off-site mitigation, the applicant shall acquire mitigation land of similar habitat at a ratio of at least 1:1. On-site mitigation shall also be completed at a ratio of at least 1:1. A habitat mitigation plan shall be prepared and submitted to the City for approval, prior to any ground disturbance.
- For projects that have the potential to result in direct or indirect impacts to sensitive natural communities, a habitat mitigation plan shall be prepared and approved in writing by the City prior to any ground disturbance. The plan shall include adaptive management practices to achieve the specified ratio for on- or off-site restoration (and/or preservation. At a minimum, the plan shall include a description of the existing conditions at the mitigation site(s), goals and timelines, installation methods, monitoring procedures, plant spacing, adaptive management strategies, and long-term maintenance requirements.

**MM BIO-11 Jurisdictional Waters**. To mitigate for impacts to waters of the U.S. and/or waters of the state, future projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) shall implement the following measures in consultation with the regulating agencies (U.S. Army Corps of Engineers [USACE], California Department of Fish and Wildlife [CDFW], and Regional Water Quality Control Board [RWQCB], as applicable):

- The applicant shall provide on- and/or off-site compensatory mitigation in order to offset permanent impacts to USACE, RWQCB, and CDFW jurisdictional waters and wetlands at a ratio of no less than 1.5:1 and/or include the purchase of mitigation credits at an agency-approved mitigation bank or in-lieu fee program.
- If compensatory mitigation is required, a compensatory mitigation plan shall be prepared in accordance with applicable agency policies and implemented, once approved by relevant agencies and the City.

### 3.4.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The Project Site is located in an urban area surrounded by commercial, residential, public facility, and institutional uses. It is completely developed with the existing City Hall building, Carson Community/Event Center, and surface parking lots. Plant life on the Project Site is limited to ornamental species used for landscaping. Animal life is comprised of common bird, insect, reptile, and small mammal species. The California Natural Diversity Database (CNDDB), a computerized database that identifies past occurrences of species of special concern (e.g., plants, animals, and communities that are rare, threatened, or endangered), identified the Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesenis*) as being presumed extant from the Pacific Ocean to approximately 0.5 miles east, 2.8 miles north, and 5.7 miles south of the Project Site. *This species is listed as endangered under the Federal Endangered Species Act* and has a state rank of S1, which indicates that the species is critically imperiled or has a high risk of extension within the state. No other candidate, sensitive, or special status species were identified on the Project Site or in the surrounding area.[11]

The general habitat for the Palos Verdes blue butterfly is restricted to the cool, fog-shrouded, seaward side of Palos Verdes Hills. The butterfly feeds on deerweed and milkvetch. The entire Project Site has been previously disturbed and developed with urban uses (i.e., structures, ornamental landscaping, and paved areas). Suitable habitat for the Palos Verdes blue butterfly does not occur within the Project Site or its surrounding area. Therefore, it is unlikely that the Modified Project would result in the loss or destruction of this species or the degradation of sensitive habitat for this species. Nevertheless, the Modified Project would continue to implement **Mitigation Measure BIO-1** (and **Mitigation Measures MM BIO-2** through **MM BIO-5** if special-status plant species or suitable habitat for endangered or threatened wildlife species are found) to ensure that development of the proposed uses on the Project Site would not adversely affect any candidate, sensitive, or special-status plant and wildlife species.

Construction of the Modified Project would require the removal of mature vegetation, some of which may potentially be used by nesting or migratory birds. However, the Modified Project is required to

[11]California Department of Fish and Wildlife, *California Natural Diversity Database*, https://wildlife.ca.gov/Data/CNDDB/Maps-and-Data#43018408-cnddb-in-bios, accessed February 2025.

comply with the Migratory Bird Treaty Act (MBTA) and the California Fish and Game Code (FGC). Under MBTA and California FGC, it is unlawful to take or possess any migratory nongame bird. Federal Endangered Species Act Section 3(19) defines "take" as to "harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct"; and California FGC Section 86 defines "take" as to "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." **Mitigation Measure MM BIO-6** from the Certified EIR would continue to apply to the Modified Project and would ensure that impacts to nesting and migratory birds would be reduced to less than significant levels.

As the Modified Project would not result in the loss or destruction of any candidate, sensitive, or special status species and would continue to implement **Mitigation Measures MM BIO-1** through **MM BIO-6** from the Certified EIR to protect nesting and migratory birds, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project, which does not have suitable habitat that support candidate, sensitive, or special status species. The Entertainment Retail Option would also involve similar types of construction activities as the Modified Project. Since construction activities would require the removal of mature vegetation, nesting and migratory birds could potentially be affected if these birds were to use the mature vegetation on the Project Site. The Entertainment Retail Option would comply with the MBTA and the California FGC, as well as implement **Mitigation Measures MM BIO-1** through **MM BIO-6** from the Certified EIR. Thus, the Entertainment Retail Option is unlikely to result in the loss or destruction of candidate, sensitive, or special status species or the degradation of sensitive habitat for these species. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The Project Site is located within an urbanized area and is generally surrounded by commercial, residential, public facility, and institutional uses. The Project Site does not contain any bodies of water or sensitive natural communities. Dominguez Channel is approximately 790 feet east of the Project Site. The Project Site does not contain any riparian habitat or features necessary to support riparian habitat. Additionally, CNDDB has not listed any riparian habitat or other sensitive natural communities on or in the immediate vicinity of the Project Site. Therefore, the Modified Project would not have any effect on riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by CDFW or USFWS. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project, which does not have any riparian habitat or features necessary to support riparian habitat. Thus, the Entertainment Retail Option is unlikely to result in the loss or destruction of riparian habitat or other sensitive natural communities identified in local or regional plans, policies, regulations or by CDFW or USFWS. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project have a substantial adverse effect on state or federally-protected wetlands, (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The Project Site does not contain any state or federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.). Dominguez Channel is approximately 790 feet east of the Project Site. The wetland within the Carson Harbor Village Mobile Home Park is approximately 2.25 feet north of the Project Site, and Bixby Marshland is approximately 2 miles southwest of the Project Site. The Modified Project does not involve any activities that would alter the Dominguez Channel and nearby wetlands. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project, which does not contain any wetlands. Therefore, the Entertainment Retail Option would not have a substantial adverse effect on state or federally protected wetlands, and the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

The Project Site and its surrounding area are highly developed with urban uses, and no wildlife corridors are on or in proximity to the Project Site. The Project Site does not contain any state or federally protected wetlands that would contain migratory fish or other wildlife species. If migratory birds were to traverse the Project Site, the birds would likely utilize mature vegetation on the Project Site, some of which may potentially provide nesting sites for migratory birds. As previously mentioned in the response to Checklist Question 3.4.2(a), above, construction of the Modified Project would require the removal of mature vegetation, some of which may potentially be used by nesting or migratory birds. However, the Modified Project is required to comply with the MBTA and the California FGC. **Mitigation Measure MM BIO-6** from the Certified EIR would continue to apply to the Modified Project and would ensure that impacts to nesting and migratory birds would be reduced to less than significant levels. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would require the removal of mature vegetation, which could potentially affect nesting and migratory birds if these birds were to use the mature vegetation on the Project Site. The Entertainment Retail Option would comply with the MBTA and the California FGC, as well as implement **Mitigation Measure MM BIO-6** from the Certified EIR. Thus, the Entertainment Retail Option would not substantially interfere with the movement of any migratory wildlife species. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(e) Would the Project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?***

The Modified Project would be required to comply with the City's City Tree Preservation and Protection Ordinance (CMC Article III, Chapter 9) to preserve and protect parkway trees and Section 9313.6 of the City's Zoning Code for the preservation and removal of existing trees. In accordance with Section 3928 of the CMC, protective measures on parkway trees would be

implemented during construction for parkway trees that would be retained. Protective measures include enclosing parkway trees by a minimum five-foot-high chain link fence or another protective barrier, placing the protective barrier at least five feet outside the dripline of the parkway trees, using hand tools and small hand-held power tools if excavation were to occur within the protective barrier, prohibiting equipment or debris to be placed within the protective barrier, and requiring access routes to be covered with six inches of mulch in the drip line area should access within the protective barrier around a parkway tree is required during construction. Section 9313.6 of the City's Zoning Code provides measures for the preservation and protection of existing trees on the Project Site. Construction fencing would be required to be placed around the dripline of each tree or group of trees to be retained. Additionally, fill, grading, construction, and trenching are not permitted within the dripline of trees that are designated for preservation. If access is necessary near the trees designated for preservation, paving within the drip line would be required to use porous materials. Trees are also required to be replaced at a minimum ratio of one new tree for every tree removed. The minimum replacement tree is required to be 15 gallons. Since the Modified Project would comply with the City's Tree Preservation and Protection Ordinance and Section 9313.6 of the City's Zoning Code, the Modified Project would not conflict with any local policies or ordinances protecting biological resources. As a result, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would be required to comply with the City's Tree Preservation and Protection Ordinance and Section 9313.6 of the City's Zoning Code. Thus, the Entertainment Retail Option would not conflict with any local policies or ordinances protecting biological resources, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(f) Would the Project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?***

The Project Site is located in an urbanized area and surrounded primarily by commercial, light industrial, and residential uses. The Project Site is not located within or adjacent to the boundaries of any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project, which is not within or adjacent to the boundaries of any adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.4.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.4.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.4.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

The Modified Project and its Entertainment Retail Option would implement **Mitigation Measures MM BIO-1** through **MM BIO-6** from the Certified EIR. **Mitigation Measures MM BIO-7** through **MM BIO-9** are not applicable to the Modified Project and its Entertainment Retail Option since the Project Site does not have any woodland habitat and does not provide suitable bat roosting habitat.

**Mitigation Measures MM BIO-10** and **MM BIO-11** are not applicable to the Modified Project and its Entertainment Retail Option since the Project Site does not have any sensitive natural communities or wetlands.

### 3.4.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.5 CULTURAL RESOURCES

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **CULTURAL RESOURCES**. Would the project: | | | | | |
| (a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5? | Significant and Unavoidable | No | No | No | Yes |
| (b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5? | Less Than Significant With Mitigation | No | No | No | Yes |
| (c) Disturb any human remains, including those interred outside of formal cemeteries? | Less Than Significant | No | No | No | No |

### 3.10.1 IMPACT DETERMINATION IN THE EIR

#### *(a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?*

The Certified EIR stated that future development proposals initiated under the General Plan Update that include construction, demolition, or alteration of buildings/structures/objects/landscape features (hereafter referred to as "historic resources" or "properties") have the potential to cause a substantial adverse change to historical resources as defined by CEQA Guidelines Section 15064.5. Anticipated development under the General Plan Update and redevelopment or revitalization of underutilized properties could result in a substantial adverse change in the significance of a historical resource through physical demolition, destruction, relocation, or alteration of the resource. New construction through infill development on vacant property could result in a substantial adverse change in the significance of a historical resource through alteration of the resource's immediate surroundings. The CEQA Guidelines note that, generally, a project that follows the Secretary of the Interior's Standards for the Treatment of Historic Properties is considered as mitigated to a level of less than significant impact on the historical resource. Projects that propose alteration of a historical resource and that do not adhere to these standards have the potential to result in a substantial adverse change in the significance of a historical resource. Other projects that propose demolition or alteration of, or construction adjacent to, existing historic resources over 45 years in age (the California Office of Historic Preservation's age threshold for consideration as historical resources), could also result in a substantial adverse change in the significance of a historical resource. Changes in the setting of historic buildings and structures can result from the introduction of new visible features, significant landscape changes, or other alterations that change the historic integrity of the setting of a significant resource.

The results of the cultural resources records search conducted for the Certified EIR indicate that a total of 143 cultural resource studies have been conducted within the 0.5-mile radius of the Planning Area. Of the 143 studies, 83 have been conducted within the Planning Area limits. The results of the cultural resources records search also indicated that a total of 51 cultural resources have been recorded within the one-half mile radius of the City. Of the 51 cultural resources previously recorded, 22 are located within the Planning Area limits. These 22 resources consist of six prehistoric

archaeological sites, one protohistoric archaeological site, seven historic archaeological sites, seven historic architectural resources, and one California Historical Landmark.

The Sacred Lands File (SLF) records search conducted for the Certified EIR revealed that no known Native American resources from the Native American Heritage Commission (NAHC) database have been recorded within the City; however, the NAHC noted "that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE." Any property that is or becomes of historic age may be a potential historical resource. A review of historic aerials indicates that there are numerous properties within the City that are more than 45 years in age. Any project that proposes the demolition, destruction, relocation, or alteration of a property that is more than 45 years in age could result in a significant impact on historical resources.

The General Plan Update policies listed below would help to identify, protect, preserve, and promote the preservation of historical resources. However, these policies do not require the identification and evaluation of historic-age properties to determine if there are historical resources within or nearby a proposed project site that could be adversely impacted by a proposed project, nor do they require the retention or rehabilitation of historical resources.

Mitigation is required to ensure that historical resources are properly identified and that impacts on any identified historical resources are reduced. However, the Certified EIR concluded that impacts on historical resources that are demolished or altered in an adverse manner such that they are no longer able to convey their historical significance and such that they are no longer eligible for inclusion in the California Register typically cannot be mitigated to a level of less than significant.

***(b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?***

The Certified EIR stated that cultural resources records search indicated that a total of 143 cultural resource studies have been conducted within the one-half mile radius of the Planning Area. Of these 143 studies, 83 have been conducted within the City's limits. The results of the cultural resources records search also indicated that a total of 51 cultural resources have been recorded within the one-half mile radius of the City. Of the 51 cultural resources previously recorded, 22 are located within the City limits. These 22 resources consist of six prehistoric archaeological sites, one protohistoric archaeological site, seven historic archaeological sites, seven historic architectural resources, and one California Historical Landmark.

Future development proposals initiated under the General Plan Update that include construction-related ground disturbance (e.g., grubbing/clearing, grading, excavation, trenching, and boring) are activities that have potential to impact, or cause a substantial adverse change to, archaeological resources. Future development that does not require ground-disturbing activities would cause no impacts on archaeological resources.

Anticipated development in the City would occur through infill development on vacant property, and through redevelopment or revitalization of underutilized properties, which could result in damage to prehistoric and historic archaeological resources as a result of construction-related ground disturbance. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of archaeological resources buried below the ground surface.

The SLF records search through the NAHC yielded negative results; however, the NAHC noted "that the absence of specific site information in the Sacred Lands File does not indicate the absence of Native American cultural resources in any APE." Based on review of historic topographic maps, the City appears to have been a highly suitable area for the inhabitance of prehistoric people. For instance, the City once contained a marshy area known as the Dominguez Slough, which would

have provided native inhabitants with food resources, such as plants and animals. The Dominguez Slough is known to have been channelized in the mid-1900s in order to provide flood protection in the South Bay area. The records search information has additionally confirmed that archaeological resources exist within the City. As a result of all these findings, the potential for encountering archaeological resources in the City is considered high. Significant archaeological sites are those that have the potential to contain intact deposits of artifacts, associated features, and dietary remains that could contribute to the regional prehistoric or historic record, or that may be of cultural or religious importance to Native American groups. Any project that proposes ground disturbance could result in a significant impact on archaeological resources.

In accordance with **Mitigation Measure MM CUL-1**, projects that identify significant archaeological resources (i.e., those resources that qualify as historical or unique archaeological resources pursuant to CEQA Guidelines Section 15064.5 and PRC Section 21083.2, respectively) and preserve them through avoidance, permanent conservation easements, capping, or incorporation into open space, would reduce impacts on archaeological resources to a level that is less than significant. If preservation in place is not feasible, projects that conduct data recovery to recover the scientifically consequential information contained in the archaeological resource would also reduce impacts to less than significant. Furthermore, the General Plan Update includes policies that would help reduce the impact of future development on archaeological resources by requiring that development and redevelopment projects conduct assessments (including a site survey and cultural resources records search) to evaluate its potential to encounter archaeological resources. Additionally, if archaeological resources and/or Native American remains are found during ground disturbance for a project, all activity shall cease until the find has been evaluated by a qualified professional archaeologist. Finally, mitigation is required to ensure that significant archaeological resources are properly identified and that the impact on any identified significant resources is reduced.

### *(c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?*

The Certified EIR stated that impacts on human remains, including those interred outside of dedicated cemeteries, could occur as a result of future development proposals initiated under the General Plan Update that include ground disturbance (e.g., grubbing/clearing, grading, excavation, trenching, and boring). Future development that does not require ground-disturbing activities would cause no impact on human remains.

Although the SLF search through the NAHC yielded negative results, the South Central Coast Information Center (SCCIC) records search identified a Native American village (Suangna) and several prehistoric archaeological sites with burials in the City. As such, future development in the City has the potential to encounter human remains during ground-disturbing activities. The treatment of human remains is regulated by California Health and Safety Code Section 7050.5, and the treatment of Native American human remains is further prescribed by PRC Section 5097.98. California Health and Safety Code Section 7050.5 requires that in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the NAHC within 24 hours to relinquish jurisdiction.

PRC Section 5097.98 provides procedures in the event human remains of Native American origin are discovered during project implementation. PRC Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. PRC Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant

(MLD) regarding the discovery of Native American human remains. The MLD has 48 hours from the time of being granted access to the site by the landowner to inspect the discovery and provide recommendations to the landowner for the treatment of the human remains and any associated grave goods. In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the landowner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

California Health and Safety Code Section 7050.5 and PRC Section 5097.98 are applicable to all projects within the Project Area. In addition, the General Plan Update includes a policy that would require future development projects to comply with state and federal law upon discovery of Native American remains. The Certified EIR concluded that adherence to existing regulations and the General Plan policy would ensure that the General Plan Update's impact associated with the disturbance of human remains would be less than significant.

**General Plan Update Policies that Address Cultural Resources**

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-6 Identify, protect, and preserve important archaeological, paleontological, tribal, and historic resources for their aesthetic, scientific, educational, and cultural values.

OSEC-G-7 Celebrate Carson's unique cultural history by promoting an understanding and appreciation of its history with residents.

*Implementing Polices*

OSEC-P-8 Development projects shall comply with state and federal law that upon discovery of Native American remains or archaeological artifacts during construction, all activity will cease until qualified professional archaeological examination and reburial in an appropriate manner is accomplished.

OSEC-P-9 For development and redevelopment proposals in archaeologically-or culturally-sensitive areas of Carson, require an assessment of the potential presence of archaeological and tribal cultural resources, including a site survey and a records search of the California Historical Resources Information System at the South Central Coastal Information Center (SCCIC). As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological and tribal cultural resources.

OSEC-P-10 Using an annually updated Archaeological Resource Sensitivity Map, review proposed development projects to determine whether a site contains known prehistoric or historic cultural resources and/or to determine the potential for discovery of additional cultural resources.

**Mitigation Measures**

**MM CUL-1** Prior to development of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and within areas that contain properties more than 45 years old, the project proponent shall retain a qualified architectural historian, defined as meeting the Secretary of the Interior's Professional Qualification Standards for architectural history, to conduct a historic resources assessment including: a records search at the South Central Coastal Information

Center; a review of pertinent archives, databases, and sources; a pedestrian field survey; recordation of all identified historic resources on California Department of Parks and Recreation 523 forms; and preparation of a technical report documenting the methods and results of the assessment. All identified historic resources will be assessed for the project's potential to result in direct and/or indirect effects on those resources and any historic resource that may be affected shall be evaluated for its potential significance under national and state criteria prior to the City's approval of project plans and publication of subsequent CEQA documents. The qualified architectural historian shall provide recommendations regarding additional work, treatment, or mitigation for affected historical resources to be implemented prior to their demolition or alteration. Impacts on historical resources shall be analyzed using CEQA thresholds to determine if a project would result in a substantial adverse change in the significance of a historical resource. If a potentially significant impact would occur, the City shall require appropriate mitigation to lessen the impact to the degree feasible.

**MM CUL-2** Prior to development of individual projects that are subject to CEQA (California Environmental Quality Act) review (i.e., non-exempt projects) and involve ground disturbance, the project proponent shall retain a qualified archaeologist, defined as meeting the Secretary of the Interior's Professional Qualification Standards for archaeology, to conduct an archaeological resources assessment including: a records search at the South Central Coastal Information Center; a Sacred Lands File search at the Native American Heritage Commission; a pedestrian field survey; recordation of all identified archaeological resources on California Department of Parks and Recreation 523 forms; an assessment of the project area's archaeological sensitivity and the potential to encounter subsurface archaeological resources and human remains; subsurface investigation to define the horizontal and vertical extents of any identified archaeological resources; and preparation of a technical report documenting the methods and results of the study. All identified archaeological resources shall be assessed for the project's potential to result in direct and/or indirect effects on those resources and any archaeological resource that cannot be avoided shall be evaluated for its potential significance prior to the City's approval of project plans and publication of subsequent CEQA documents. The qualified archaeologist shall provide recommendations regarding protection of avoided resources and/or recommendations for additional work, treatment, or mitigation of significant resources that will be affected by the project.

### 3.10.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

#### *(a) Would the Project cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines §15064.5?*

CEQA Guidelines Section 15064.5 generally defines a historical resource as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual; or possessing high artistic values.

The existing Carson City Hall building, which was completed in 1976, is a potential historic resource. The building was designed by an architecture team that reflected the City's commitment to representing its diverse population. The team included African American architect Robert Kennard

of Kennard, Delahousie & Gauld, Japanese American architect Frank Sata, Robert Alexander, Japanese American landscape architect Yoshito Kuromiya, and Latino interior and graphics designer Michal Sanchez. This diverse team was chosen to design a building that would not only serve as the administrative heart of the City but also symbolize the City's inclusive and forward-thinking values. Their collaboration ensured that the existing City Hall, completed in 1976, functionally and aesthetically aligned with the community's multicultural identity.[12] The lead architect, Robert Kennard, was part of the second generation of African American architects.

The existing City Hall building represents a variation of Late Modern architecture that integrates historic influences, particularly Spanish Colonial Revival, also known as "Neo-Spanish Eclectic." The building aimed at reflecting the Spanish heritage of the Dominguez Hills area, and the building design was often referred to as "Spanish Modern." The building features an open interior, simplified outside forms, three wings that create a "Y" shape, and featured "Spanish Modern" elements such as a flat roof, minimal tile work, and earth-toned stucco cladding. The building's architectural elements also included a prominent arched entryway, concentric arches, and unique geometric forms that blended Modern proportions with historicist aesthetics. This approach was part of a broader Late Modern trend, particularly prevalent in Southern California, which incorporated Spanish Colonial Revival elements into residential, commercial, and institutional buildings. The Spanish-inspired design elements of the building acknowledge the area's history and ties with Spain and Mexico. In 2023, the City was one of the recipients of the 2023 Conserving Black Modernism grants from the National Trust for Historic Preservation to support preservation of the existing building.

To ensure that the integrity of the existing Carson City Hall building would be maintained, the proposed project would retain, renovate, and repurpose the existing building to potentially accommodate either a civic museum or historical archive center that would showcase the City's municipal history and community development, community services or cultural resource center that offers flexible public meeting spaces and administrative support services, and/or satellite offices for City departments. The Secretary of the Interior's Standards for the Treatment of Historic Properties would be followed.

A record search of the Project Site at the California Historical Resources Information System (CHRIS) SCCIC housed at California State University at Fullerton was conducted and did not identify any archaeological resources, built environmental resources, Office of Historic Preservation built environment resources, California Points of Historical Interests, California Historic Landmarks, California Register of Historical Resources, and National Register of Historic on the Project Site.[13]

The SLF records search for the Project Site revealed that no known Native American resources from the NAHC database have been recorded. The NAHC noted that "records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource."

The Modified Project would continue to implement **Mitigation Measure MM CUL-1** from the Certified EIR and would follow the Secretary of the Interior's Standards for the Treatment of Historic Properties when renovating and repurposing the existing City Hall building. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[12]Architectural Resources Group, *Carson City Hall*, https://storymaps.arcgis.com/stories/8aa5aafb0137489d9c353c768c492ede, accessed September 2025.

[13]California State University, Fullerton, South Central Coastal Information Center, *Record Search Results for the Carson Civic Center Specific Plan Project at 701 and 801 East Carson Street, Carson*, November 24, 2025.

**Entertainment Retail Option**

The Entertainment Retail Option would involve the same type of construction and operational activities for the existing City Hall as the Modified Project. **Mitigation Measure MM CUL-1** from the Certified EIR would continue to apply and the renovation and repurposing of the existing City Hall building would follow the Secretary of the Interior's Standards for the Treatment of Historic Properties. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?***

CEQA Guidelines Section 15064.5 defines significant archaeological resources as resources which meet the criteria for historical resources or resources that constitute unique archaeological resources associated with a scientifically recognized important prehistoric or historic event or person.

The Project Site is located in an urbanized area that has been subject to previous grading and development. Any surficial archaeological resources that may have existed on the Project Site are likely to have been previously disturbed or removed. The SCCIC records search results that was conducted for the Project Site did not identify any archaeological resources that are known to be located on the Project Site.[14] Although no archaeological resources are known to exist on the Project Site, encountering unanticipated archaeological resources during ground disturbance is a possibility. The Modified Project would continue to comply with **Mitigation Measure MM CUL-2** from the Certified EIR, which requires the preparation of an archaeological resource assessment and compliance with any recommendations identified in the report. Thus, the Modified Project would not cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site and involve the same types of ground disturbing activities as the Modified Project. Although the SCCIC records search results for the Project Site did not identify any archaeological resources that are known to be located on the Project Site, encountering unanticipated archaeological resources during ground disturbance is a possibility. The Entertainment Retail Option would continue to comply with **Mitigation Measure MM CUL-2** from the Certified EIR, which requires the preparation of an archaeological report and compliance with any recommendations identified in the report. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project disturb any human remains, including those interred outside of formal cemeteries?***

The Project Site is not part of a formal cemetery and is not known to have been used for disposal of historic or prehistoric human remains. No human remains are known to be present within the Project Site. However, the discovery of human remains is always a possibility during ground disturbing activities. If human remains are found, the Modified Project would comply with California Health and Safety Code Section 7050.5 and PRC Section 5097.98. These regulations are described in the response to Checklist Question 3.5.1(c), above. With adherence to applicable regulations related to the handling of human remains, including those of Native American origin, the Modified

[14]California State University, Fullerton, South Central Coastal Information Center, *Record Search Results for the Carson Civic Center Specific Plan Project at 701 and 801 East Carson Street, Carson*, November 24, 2025.

Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site and involve the same types of ground disturbing activities as the Modified Project. The Entertainment Retail Option would be required to comply with California Health and Safety Code Section 7050.5 and PRC Section 5097.98. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.10.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.10.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.10.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

The Modified Project and its Entertainment Retail Option would implement **Mitigation Measures MM CUL-1** and **MM CUL-2** from the Certified EIR.

### 3.10.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.6 ENERGY

| Issues (and supporting Information Sources) | Impact Determination in the Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impact or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **ENERGY**: Would the project: | | | | | |
| (a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | Less Than Significant | No | No | No | No |
| (b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency? | Less Than Significant | No | No | No | No |

## 3.6.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

### *Construction*

**Electricity.** The Certified EIR stated that electricity would be consumed during construction on a limited basis to power lighting, electric equipment, and supply and convey water for dust control. During construction of new development, the electricity demand at any given time would vary throughout the construction period based on the construction activities being performed and would cease upon completion of construction. Electricity use from construction would be short-term, limited to working hours, and used for necessary construction-related activities. When not in use, electric equipment would be powered off so as to avoid unnecessary energy consumption. Furthermore, the electricity used for off-road light construction equipment would have the co-benefit of reducing construction-related energy use from more traditional construction-related energy, such as diesel fuel. Therefore, the Certified EIR concluded that the impact from construction electrical demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

**Natural Gas.** The Certified EIR stated that construction activities, including the construction of new buildings and facilities, typically do not involve the consumption of natural gas. Accordingly, natural gas would generally not be supplied to support construction activities; thus, there would be no expected demand generated by future construction under the General Plan Update. If natural gas is used during construction, it would be in limited amounts and on a temporary basis and would specifically be used to replace or offset diesel-fueled equipment and as such would not result in substantial on-going demand. Therefore, the Certified EIR concluded that the impact from construction natural gas demand would be less than significant and would not result in the wasteful, inefficient, and unnecessary consumption of energy.

**Transportation Energy.** The Certified EIR stated that transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world.

Based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption. Construction of new development that could occur from adoption of the General Plan Update would utilize fuel-efficient equipment consistent with state and federal regulations, such as the fuel efficiency regulations in accordance with the SAFE Vehicle Rule and Advanced Clean Truck Program, which would result in more efficient use of transportation fuels (lower consumption). Construction equipment and vehicles would also be required to comply with anti-idling regulations in accordance with Section 2485 in Title 13 of the California Code of Regulations, and fuel requirements in accordance with Section 93115 in Title 17 of the California Code of Regulations. As such, construction of new development would comply with regulatory measures to reduce the inefficient, wasteful, and unnecessary consumption of energy, such as petroleum-based transportation fuels. While some of these regulations are intended to reduce construction emissions, compliance with the anti-idling and emissions regulations discussed above would also result in fuel savings from the use of more fuel-efficient engines.

Based on the above, construction would utilize energy only for necessary on-site activities and to transport construction materials and demolition debris to, from, and within the City. Idling restrictions and the use of cleaner, energy-efficient equipment and fuels would result in less fuel combustion and energy consumption and, thus, minimize construction-related energy use. Therefore, the Certified EIR concluded that construction of new development that could occur with the adoption of the General Plan Update would not result in the wasteful, inefficient, and unnecessary consumption of energy, and this impact would be less than significant.

### *Operation*

**Electricity.** The Certified EIR stated that operation of new development that could occur from adoption of the General Plan Update would result in demand for electricity resources including for water supply, conveyance, distribution, and treatment. Operation of existing development and new development under the General Plan Update would result in a net increase of approximately 2,520 megawatt-hours (MWh) per year of electricity compared to existing conditions. New development under the General Plan Update would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance. Since the standards are updated every three years, future new development under the General Plan Update would be designed to include energy saving features to comply with future Title 24 standards and CALGreen Code requirements, which may include greater use of energy and water efficient fixtures and fittings, energy efficient mechanical systems, light pollution reduction, site development best practices, sub metering, water efficient landscapes, recycling, and superior weather resistance and moisture management. Further, implementation of policies in the General Plan Update would reduce the electricity demand from new development in the City by promoting energy efficiency designs and strategies beyond regulatory requirements and policies for renewable energy. Therefore, operations would not result in the wasteful, inefficient, and unnecessary consumption of electricity.

For the 2020 fiscal year, Southern California Edison (SCE) had an annual electric sale to customers of approximately 85,399,000 MWh. The net increase in future electricity demand from existing development and new development that could occur from adoption of the General Plan Update would represent approximately 0.003 percent of the SCE network sales for 2020. Under peak conditions, the net increase of 2,520 MWh on an annual basis would generally be equivalent to a peak of 0.3 to 0.6 megawatt (MW) (assuming 8,760 hours or 4,380 hours per year of active electricity demand). In comparison to the SCE power grid base peak load of 23,881 MW for 2020, the net increase would represent approximately 0.001 to 0.002 percent of the SCE base peak load conditions. Thus, the Certified EIR concluded that it is likely that the net increase in electricity would generally be served by existing infrastructure capacity, and the impact related to electrical supply and infrastructure capacity would be less than significant.

**Natural Gas.** The Certified EIR stated that new development that could occur from adoption of the General Plan Update would result in demand for natural gas resources. As would be the case with electricity, new development would comply with the applicable provisions of Title 24 and the CALGreen Code in effect at the time of building permit issuance to minimize natural gas demand. Since the energy efficiency standards are updated every three years, future new development with adoption of the General Plan Update would be designed to include energy saving features to comply with future Title 24 standards and CALGreen Code requirements, which could include improvements to water heating efficiency or reduced natural gas-fueled systems in buildings. Further, implementation of policies in the General Plan Update would reduce the demand for natural gas from new development in the City by promoting energy efficiency designs and strategies beyond regulatory requirements and policies for renewable energy. Therefore, the Certified EIR concluded that operations would not result in the wasteful, inefficient, and unnecessary combustion of natural gas.

According to Southern California Gas Company (SoCalGas) data, natural gas demand has been relatively stable over the past three years ranging from 2,342 million cubic feet (MMcf) per day or 854,830 MMcf total in 2018 to 2,435 MMcf per day or 888,775 MMcf total in 2020. The net increase in future natural gas demand from existing development and new development that could occur from adoption of the General Plan Update would account for approximately 0.0003 percent of SoCalGas' 2020 sales. According to the 2020 California Gas Report, SoCalGas is forecasted to require 767,595 MMcf in the year 2035, the latest available projected year. The estimated increase in natural gas demand of 2,689,888 cf per year would account for approximately 0.0004 percent of SoCalGas' projected natural gas demand for the year 2035. Therefore, it is anticipated that SoCalGas' existing and planned natural gas supplies would be sufficient to support the demand for natural gas at full City buildout conditions. Therefore, the Certified EIR concluded that it is likely that the net increase in natural gas would generally be served by existing infrastructure capacity and the impact related to natural gas would be less than significant.

**Transportation Energy.** The Certified EIR stated that transportation fuels (gasoline and diesel) are produced from crude oil, which can be domestic or imported from various regions around the world, and based on current proven reserves, crude oil production would be sufficient to meet over 50 years of worldwide consumption.

Traffic reduction policies within the General Plan Update Circulation Element may not be fully reflected in the VMT and transportation fuel consumption estimates. Therefore, estimated mobile source transportation fuel consumption are conservatively higher. The location, design, and land uses of the growth anticipated with adoption of the General Plan Update would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing commercial and residential density with over 95 percent of new residential development planned for multi-family dwelling units, which would allow for increased mixed-use density at infill locations and near public transit. Several transit agencies provide local and regional transit service to the residents of the City, including Metro, Long Beach Transit, Compton Renaissance Transit, Gardena Transit, and Torrance Transit.

The General Plan Update focuses on infill development and revitalization to help the City transition from a predominantly industrial and suburban community to a complete City with an integrated mix of housing, employment, educational, cultural, and recreational options balanced with industrial uses. These efforts are targeted in the Core and in centers around the Core, expanding on recent development along Carson Street. Development in the centers, along key corridors, and large opportunity sites such as the Shell property on East Del Amo Boulevard and South Wilmington Avenue are envisioned to be connected by community-oriented Boulevards that feature public gathering spaces and pedestrian- and bicycle-oriented designs. New land use designations that introduce greater flexibility through emphasis on mixed uses instead of single uses are proposed to

facilitate development to achieve this vision and respond to the need to accommodate the City's growing and diverse population. The focus on infill development and land use designations for mixed uses would support land use and transportation strategies by providing for greater density near transit. Higher densities, especially in mixed-use designations, increase capacity for residential development near community-serving commercial, retail, and office uses as well as schools, parks, and recreational facilities, and proposed improvements to the bicycle, pedestrian, and road networks will make it easier for residents to travel throughout the community. Therefore, adoption of the General Plan Update would support statewide and regional efforts to improve transportation energy efficiency and reduce transportation energy consumption.

As the General Plan Update would support statewide and regional efforts to improve transportation energy efficiency, and adoption of the General Plan Update would not conflict with the 2020–2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better "placemaking," provide more transportation choices, and reduce vehicular demand and associated emissions. Therefore, adoption of the General Plan Update would not conflict with the actions and strategies contained in the 2020-2045 RTP/SCS. In fact, the general location of new development that would occur under the General Plan Update would not conflict with the recommendations in these documents and would support their goals. In addition, with the adoption of the General Plan Update, municipal solid waste would continue to be diverted to City-certified construction and demolition waste processors using City-certified waste haulers, which include El Sobrante Landfill and H.M. Holloway Inc. Landfill. Diversion of solid waste would reduce truck trips to landfills, which are typically located some distance away from City centers and would increase the amount of waste recovered (e.g., recycled, reused, etc.) at material recovery facilities, thereby further reducing transportation fuel consumption. Assembly Bill (AB) 341, adopted in 2012, requires that commercial enterprises that generate four cubic yards or more of solid waste and multi-family housing complexes of five units or more participate in recycling programs in order to meet California's goal to recycle 75 percent of its solid waste by 2020. Senate Bill (SB) 1383, adopted in 2016, establishes goals of 50 percent organics waste reduction by 2020 and 75 percent reduction by 2025. Development of future land uses, as projected in the General Plan Update, would be required to comply with federal, state, and local statutes and regulations related to solid waste. Furthermore, the policies provided in the General Plan Update regarding solid waste disposal and associated public facilities would further ensure compliance with applicable regulations. Compliance with federal, state, and local waste management and reduction statutes and regulations related to solid waste would reduce waste-related transportation energy.

The Certified EIR concluded that based on the above, future new development with the adoption of the General Plan Update would minimize operational transportation fuel demand in line with state, regional, and county goals. Therefore, the General Plan Update would not lead to wasteful, inefficient, and unnecessary consumption of energy, and this impact would be less than significant.

### *(b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

***Construction.*** The Certified EIR stated that construction of new development that could occur from adoption of the General Plan Update would utilize construction contractors who must demonstrate compliance with applicable regulations. Construction equipment would be required to comply with federal, state, and regional requirements where applicable. With respect to truck fleet operators, the U.S. EPA and National Highway Traffic Safety Administration (NHSTA) have adopted fuel-efficiency standards for medium- and heavy-duty trucks that will be phased in over time. Phase 1 heavy-duty truck standards apply to combination tractors, heavy-duty pickup trucks and vans, and vocational vehicles for model years 2014 through 2018 and result in a reduction in fuel consumption from 6 to 23 percent over the 2010 baseline, depending on the vehicle type. The EPA and NHTSA also adopted the Phase 2 heavy-duty truck standards, which cover model years 2021 through 2027 and

require the phase-in of a 5 to 25 percent reduction in fuel consumption over the 2017 baseline depending on the compliance year and vehicle type. These regulations would have an overall beneficial effect on reducing fuel consumption from trucks over time as older trucks are replaced with newer models that meet the standards.

In addition, construction equipment and trucks are required to comply with CARB regulations regarding heavy-duty truck idling limits of five minutes per occurrence and location. Additionally, CARB regulations regarding in-use off-road equipment require older, less efficient equipment to be replaced or repowered with newer, more efficient models or engines. These regulations would result in an increase in energy savings in the form of reduced fuel consumption from more fuel-efficient engines. Although these requirements are intended to reduce criteria pollutant emissions, compliance with the anti-idling and emissions regulations would also result in the efficient use of construction-related energy. Thus, the Certified EIR concluded that based on the information above, construction of new development under the General Plan Update would comply with existing energy standards, and the impact would be less than significant.

***Operations*.** The Certified EIR stated that operation of new development that could occur from adoption of the General Plan Update would be designed in a manner that is consistent with relevant energy conservation plans designed to encourage development that results in the efficient use of energy resources. New development would comply with Title 24 requirements and CALGreen to reduce energy consumption by implementing energy efficient building designs, pre-wiring residences with electric vehicle charging ports, implementing solar-ready rooftops, reducing indoor and outdoor water demand, and installing energy-efficient appliances and equipment. The City of Carson Energy Efficiency Climate Action Plan (EECAP) identifies community-wide strategies to lower energy use. Energy reductions within the EECAP are from transportation, land use, energy generation and consumption, water consumption and waste generation. The General Plan Update incorporates the EECAP goals and policies for energy efficiency and renewable energy, including electric vehicle charging, which would source transportation energy from renewable sources in accordance with the Renewables Portfolio Standard. Thus, new development under the General Plan Update would incorporate EECAP goals and policies as part of future development approvals and would not result in conflicts with the plan.

Through the City's EECAP, the City has established goals and strategies that would reduce energy use. The EECAP focuses on increasing energy efficiency and reducing GHG emissions from energy to meet attainment goals. In addition to EECAP energy efficiency goals, utility providers (such as SCE) are required to provide 50 percent of their electricity supply from renewable sources by the year 2030, further reducing the GHG intensity of supplied electricity. New development under the General Plan Update would comply with CALGreen energy efficiency requirements, which would be consistent with EECAP goals for increasing energy and water use efficiency in new residential and commercial developments. With respect to operational transportation-related fuel usage, future development under the General Plan Update would support statewide efforts to improve transportation energy efficiency and reduce transportation energy consumption with respect to private automobiles. Vehicles associated with new development would be required to comply with CAFE fuel economy standards, which are designed to result in more efficient use of transportation fuels.

Furthermore, adoption of the General Plan Update would not conflict with the 2020– 2045 RTP/SCS goals and benefits intended to improve mobility and access to diverse destinations, provide better "placemaking," provide more transportation choices, and reduce vehicular demand and associated emissions. The 2020–2045 RTP/SCS includes land use and transportation strategies that are intended to reduce VMT and resulting fuel consumption. The applicable land use strategies include planning for growth around livable corridors; providing more options for short trips/neighborhood mobility areas; supporting zero emission vehicles and expanding vehicle charging stations; and

supporting local sustainability planning. The applicable transportation strategies include managing through a Transportation Demand Management (TDM) Program and Transportation System Management (TSM) Plan, including advanced ramp metering, and expansion and integration of the traffic synchronization network; and promoting active transportation. The majority of the transportation strategies are to be implemented by cities, counties, and other regional agencies such as SCAG and SCAQMD, although some can be furthered by individual development projects.

Policies in the Circulation Element include policies in-line with the 2020–2045 RTP/SCS, such as encouraging local government and employers to implement TDM policies that promote VMT reductions, promoting bike-sharing, car-sharing and other electrified modes as options to reduce traffic congestion, and focusing truck traffic onto appropriate arterial corridors in the City. Further, the location, design, and land uses from growth anticipated by the General Plan Update would implement land use and transportation strategies related to reducing vehicle trips for residents and employees of the City by increasing commercial and residential density with over 95 percent of new residential development planned for multi-family dwelling units, which would allow for increased mixed-use density at infill locations and near public transit. Several transit agencies provide local and regional transit service to the residents of the City, including Metro, Long Beach Transit, Compton Renaissance Transit, Gardena Transit, and Torrance Transit. Several routes in the City provide access to the Metro A (Blue) Line, which passes through the eastern edge of the City without stops. The Harbor Gateway Transit Center is located just west of the City, adjacent to I-110. This transit center is a stop on the Metro Silver Line, which provides critical regional access to downtown Los Angeles and east to the El Monte Station. Connection to the Transit Center is provided by Metro Lines 52 and 246. Both Long Beach Transit and Torrance Transit provide access to Long Beach, including the Long Beach Transit Gallery, located at the downtown Long Beach A Line station. Torrance Transit also provides access to the South Bay, including to the South Bay Galleria Transit Center and the Redondo Beach Pier.

The General Plan Update focuses on infill development and revitalization to help the City transition from a predominantly industrial and suburban community to a complete City with an integrated mix of housing, employment, educational, cultural, and recreational options balanced with industrial uses. These efforts are targeted in the Core and in centers around the Core, expanding on recent development along Carson Street. Development in the centers, along key corridors, and large opportunity sites such as the Shell property on East Del Amo Boulevard and South Wilmington Avenue are envisioned to be connected by community-oriented Boulevards that feature public gathering spaces and pedestrian- and bicycle-oriented designs. New land use designations that introduce greater flexibility through emphasis on mixed uses instead of single uses are to facilitate development to achieve this vision and respond to the need to accommodate the City’s growing and diverse population.

The General Plan Update outlines strategies for greater integration of uses in different parts of the City and a better connection between employment and residential uses, with more areas designated for mixed-use development. It recognizes the physical elements that help define the character of the City, including existing residential neighborhoods, Downtown Core, industrial/business centers, and corridors. This structure helps establish a clear multi-modal network throughout the City by focusing on both community destinations as well as the efficiency, safety, and convenience of the modes of transportation in between. Higher densities, especially in mixed-use designations, increase capacity for residential development near community-serving commercial, retail, and office uses as well as schools, parks, and recreational facilities, and improvements to the bicycle, pedestrian, and road networks will make it easier for residents to travel throughout the community. Therefore, the General Plan Update would not conflict with RTP/SCS land use and transportation strategies that are intended to reduce VMT and resulting fuel consumption.

Based on the information above, the Certified EIR concluded that operation of new development under the General Plan Update would comply with plans for energy efficiency and renewable energy and this impact would be less than significant.

**General Plan Update Policies that Address Energy**

***Land Use and Revitalization***

*Guiding Policies*

LUR-G-2 Balance employment and housing within the community to provide more opportunities for Carson residents to work locally, cut commute times, and improve air quality.

LUR-G-4 Promote a diversity of complementary uses in different parts of the City, including mixed flexible office space, retail, dining, residential, hotels, and other compatible uses, to foster vibrant, safe, and walkable environments, with flexibility to accommodate emerging uses and building typologies.

LUR-G-6 Encourage revitalization of corridors as pedestrian-oriented, mixed-use residential, retail, and office community spines, serving as focal points for neighborhood amenities and services, and helping foster neighborhood identity and vitality.

LUR-G-7 Develop Carson's central Core—extending approximately 1.7 miles both east-west along West Carson Street and north-south along Avalon Boulevard and including the South Bay Pavilion—into a vibrant, pedestrian-oriented mixed-use hub of the community, with housing, retail, and other commercial uses, and civic uses and community gathering spaces.

LUR-G-9 Locate medium and high-density development along major corridors and major re-development sites in the central Core, to focus housing near regional access routes, transit stations, employment centers, shopping areas, and public services.

LUR-G-11 Encourage mixed-use development (two or more uses within the same building or in close proximity on the same site), especially in the Core area, to promote synergies between uses.

*Implementing Policies*

LUR-P-1 Where feasible, locate higher density residential uses in proximity to job centers and commercial centers in order to discourage long commute times and encourage pedestrian traffic and provide a consumer base for commercial uses.

LUR-P-8 Promote development of neighborhood-scaled commercial centers in residential areas to serve the everyday needs of nearby residents.

LUR-P-11 Promote ground level commercial uses to foster pedestrian activity and visual engagement and provide commercial uses to serve residents of surrounding neighborhoods. Where commercial uses are or were present as of 2021, at least half of the commercial area shall be retained or replaced as part of new development. Where more than 0.1 FAR ground level active commercial uses are provided (new or through replacement), the City may grant residential density increase up to 60 percent on a graduated scale as specified in the Zoning Ordinance and Table 2-2.

LUR-P-12 Prohibit uses in the Core (as shown in Figure 2-3) that do not add to a strong pedestrian character, such as warehouses, gas stations, drive-through

establishments, industrial, and other new development whose design prioritizes automobile access.

LUR-P-13 Focus new residential, commercial and employment-generating land uses along Carson Street and Avalon Boulevard in order to support higher-frequency transit service. Provide adequate infrastructure, such as bus lanes or bus shelters at bus stops, to support transit service usage.

LUR-P-16 Where larger parcels—such as the Shell site—are redeveloped, require development to implement urban design policies, including creation of smaller blocks (typically with no dimension larger than 300 to 600 feet dependent on use, with smaller blocks in residential areas) to create walkable, urban environments; buildings and landscapes that relate to the surroundings, with high-level of public-realm amenities, such as tree-lined streets; sidewalks, pedestrian paths, and crossings; and plazas and other gathering spaces for workers and visitors. Site planning for new construction should ensure that streets are lined with occupied buildings or landscapes, with parking and service facilities tucked behind or away from public streets.

LUR-P-18 Promote infill mixed-use development in either a vertical or horizontal configuration when aging shopping centers are redeveloped to create mixeduse corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.

LUR-P-24 Promote the development of sites designated as Business Residential Mixed Use (BRMU) with a vibrant mix of business and residential uses that include:

- For the Shell site, require at least a minimum of 25 acres of open space, 18 of which as a centralized park or open space and seven acres along the western border of the property as a Greenway Corridor/buffer. Exact locations and acreages should be specified during project planning.
- For the Shell site, require at least a minimum nine acres of General Commercial at the south-west corner of Del Amo Boulevard and Wilmington Avenue or at a centralized location. Other commercial uses are encouraged throughout the site as mixed-use development.
- Encourage residential development with a range of housing types, and technology, research and development, and office uses if determined to be suitable from an environmental perspective.
- Require development to be connected to the surroundings, with through streets, and walkable urban design patterns. See additional policies in Chapter 4: Community Character, Identity, and Design Element.
- When housing is proposed adjacent to industrial uses, require the development of a cohesive master or specific plan to include surrounding property owners to ensure compatibility. The Shell site is required to have a similar plan to outline long-term growth of the site.

### *Circulation*

*Guiding Policies*

CIR-G-1 Provide a balanced transportation system of multimodal networks providing a broad range of travel options to make transportation convenient, comfortable, and safe for people of all abilities.

CIR-G-2 Promote bicycling and walking, and support and improve connections to local and regional transit service.

CIR-G-3 Manage the transportation network to minimize roadway congestion, while balancing traffic Level of Service (LOS) objectives with promoting reduction in vehicle miles traveled and considerations of community character and design.

CIR-G-4 Encourage the development of a multimodal freight transportation system that balances the need for effective and efficient transportation of goods with the health and wellbeing of the community

*Implementing Policies*

CIR-P-1 Update the City's Bicycle Plan, identifying a citywide bicycle network of offstreet bike paths, on-street bike lanes and bike streets. As part of the plan, consider bicycle lockers, secure bike parking, pavement condition, and access to transit, parks, and schools throughout the City. The update of the Bicycle Plan should strategically identify projects that will improve equity, the environment, reduce trips on the roadway system, and prioritize projects that align with primary local active transportation grant funding programs including Metro, SCAG, and Caltrans.

CIR-P-2 Develop a First Last Mile Plan to improve walking and biking connections to future and existing transportation hubs.

CIR-P-3 Establish bike hubs (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes), at key transit nodes or commercial nodes.

CIR-P-4 Evaluate opportunities, such as new development or changes to the transit network, to enhance existing and proposed Class II bike lanes and Class III bike routes to protected bike lanes and bike routes to bike lanes or bike boulevards.

CIR-P-16 Work with Long Beach Transit to serve local neighborhoods and connect residences with shopping, employment, transit, and recreational opportunities.

CIR-P-17 Participate in and encourage collaboration among adjacent cities to provide a more reliable public transportation system the area.

CIR-P-19 Work with regional transit services to develop an on-demand transportation system that caters to senior populations and people with disabilities.

CIR-P-20 Evaluate and adjust transit routes to better connect disadvantaged communities with major transit hubs and key destinations such as parks, schools, and healthy food opportunities.

CIR-P-21 Work with transit providers in the City to implement public transportation improvements and enhance first-last mile connections at highly utilized transit stops.

CIR-P-22 Develop a transportation demand management (TDM) ordinance. A TDM ordinance would incorporate strategies appropriate for the local context and land use as different strategies are more effective at reducing employee commute trips, while others focus on reducing residential, shopping, or other discretionary trips. Strategies will generally focus on land use, parking, transit, and active transportation.

CIR-P-23 Pursue the implementation of TDM strategies through application of the City's Transportation Study Guidelines and compliance with Senate Bill 743 that seeks to reduce per capita VMT for residential, retail, and office trips.

CIR-P-24 Encourage local public agencies and employers to implement TDM policies that promote VMT reductions. The research in this area is regularly evolving and can help identify viable and defensible VMT reduction strategies.

CIR-P-25 Evaluate the potential for strategies that can reduce VMT such as citywide bike-sharing, promote car-sharing and other electrified modes as options to reduce traffic congestion.

CIR-P-26 Prioritize and identify disadvantaged community locations to develop sustainable mobility hubs that include car-sharing, bike-sharing and public EV charging infrastructure to minimize traffic and air quality effects.

CIR-P-27 Require all new and substantially renovated office, retail, industrial, and multifamily developments to provide EV charging infrastructure and EV ready parking.

CIR-P-32 Enhance infrastructure to accommodate last mile delivery services for low carbon solutions, such as last mile bicycle delivery.

CIR-P-33 Promote the deployment of near-zero and zero-emissions trucks for urban deliveries, port drayage trips, regional, and long-haul trips by providing charging infrastructure and plug-in technologies for extended idling.

CIR-P-34 Encourage deployment of alternative-fueled vehicles through advancement of new technologies, such as autonomous vehicles that are anticipated to be a pathway to electric vehicles.

***Community Health and Environmental Justice***

*Guiding Policies*

OSEC-G-14 Promote sustainable energy generation practices to support energy security that is resilient to blackouts and other climate or anthropogenic disasters.

OSEC-G-15 Implement programs and work with jurisdictional partners to increase sustainable energy production and energy security.

OSEC-G-25 Demonstrate leadership by reducing the use of energy and fossil fuel consumption in municipal operations, including transportation, waste and water reduction, recycling, and by promoting efficient building design and use.

*Implementing Policies*

OSEC-P-29 Promote renewable energy generation and storage to decrease reliance on outside sources and minimize impacts from blackouts. Potential Strategies Include:

- Incentivize solar panel deployment beyond state's mandates and pursue state, regional, and federal funding programs designed to reduce energy demand through conservation and efficiency. Establish guidance on placement of solar panels to minimize impacts to aesthetic resources.
- Promote renewable energy generation on City-owned sites and deployment of micro-grids for energy independence and lifeline operations in the event of power shutdowns.

- Reduce reliance on backup generators that rely on fossil fuels by establishing citywide program to transition to more climate friendly options including battery storage, solar-powered generators, and small scale wind turbines in appropriate areas.
- Promote alternative modes of electricity generation—such as wind, solar, biomass, geothermal, and hydroelectric—and invest in electric storage infrastructure at the City-wide level.
- Increase installation of electric vehicle charging stations with funding from state and federal sources.
- Convert street lighting, water pumping, water treatment, and other energy intensive operations to more efficient technologies.

OSEC-P-41 Encourage efficient, clean energy and fuel use through collaborative programs, award programs, and incentives, while also removing barriers to the expansion of alternative fuel facilities and infrastructure.

OSEC-P-51 Use the CAP as the City's primary strategy to reduce GHG emissions, including strategies related to land use and transportation, energy efficiency, solid waste, urban greening, and energy generation and storage.

OSEC-P-57 Facilitate energy efficiency in building regulations, providing flexibility to achieve specified energy performance levels and requiring energy efficiency measures as appropriate.

OSEC-P-58 Support sustainability measures to reduce and conserve municipal and private energy uses, especially from commercial and industrial uses which consume 78 percent of the City's total electric usage.

OSEC-P-59 Coordinate with the business and industrial community to encourage energy efficiency in the City's largest energy users while supporting economic growth objectives.

**Mitigation Measures**

None required.

### 3.6.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

***Construction.*** During construction of the Modified Project, energy resources would be primarily consumed in the form of petroleum fuels (gasoline and diesel fuel) to power off-road equipment and on-road vehicles, and electricity consumption associated with signal boards for traffic control, small power tools, the supply of water into trucks for on-site fugitive dust control, and indirect electricity at remote concrete batch plants to fill cement trucks. Construction activities for land use development projects typically do not involve the consumption of natural gas.

Diesel fuel for off-road equipment and heavy-duty trucks would be sourced from regional commercial retailers that do business with construction contractors. All off-road equipment used in construction activities would be inspected regularly and maintained in accordance with manufacturer specifications to ensure optimal operating efficiency. Contractors would be required to comply with CARB Regulation for In-Use Off-Road Diesel-Fueled Fleets ("Off-Road Regulation"),

which prohibits equipment idling to less than five consecutive minutes. A similar requirement is applicable to heavy-duty trucks used in the hauling of debris and excavated soils and construction material deliveries in accordance with Title 13 California Code of Regulations Section 2485 (Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling), which also imposes a limit of no more than five consecutive minutes of truck idling in any one particular location. Adherence to these best management practices and regulatory compliance measures would prevent the wasteful and unnecessary consumption of diesel fuel throughout the construction process.

Motor gasoline would be consumed by construction crew vehicles and light duty service trucks that would commute to and from the Project Site. It is anticipated that crew vehicles would be predominantly privately owned and fueled at service stations throughout the greater Los Angeles area. It is reasonable to assume that these vehicles would be a typical representative sample of light duty vehicles operating in the region, and that they were manufactured in accordance with applicable regulations such as the Corporate Average Fuel Economy (CAFE) standards. Newer model year vehicles would be subject to the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule, as applicable. Gasoline consumption associated with construction vehicles would be specific to commuting vehicle trips and would be temporary in nature, ceasing upon completion of Modified Project construction. Therefore, compliance with regulatory requirements and adherence to best management practices would ensure that construction would not result in wasteful, inefficient, or unnecessary consumption of energy resources. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***Operations.*** Future operation of the Modified Project would require the expenditure of energy resources in the form of electricity consumption, natural gas combustion, and petroleum-based transportation fuels in on-road vehicle engines. SCE is the electric utility provider for the City, and SoCalGas would provide natural gas to the Project Site. Energy use associated with operation of the Modified Project would be typical of commercial and residential uses, requiring electricity and natural gas for interior and exterior building lighting; heating, ventilation, and air conditioning; electronic equipment; machinery; refrigeration; appliances; security systems; and more. The Modified Project incorporates design standards that would minimize energy demand, such as compliance with the CALGreen Code, installation of high-efficiency interior and exterior lighting fixtures, low-flow water end uses, natural daylighting, passive solar and ventilation techniques, and drought-tolerant and water-efficient landscaping. The Specific Plan would also incorporate designs to accommodate on-site renewable energy features (i.e., photovoltaic solar panels) if elected to be installed at a future date. Maintenance activities during operations, such as landscaping and utility services, would involve the use of electric or gas-powered equipment and vehicles. Implementation of AB 1346 banned the sale of new small off-road gas-powered engines like lawnmowers, leaf blowers, and trimmers beginning in January 2024, with small generators to be phased in by 2028.

In addition to on-site energy use, the Modified Project would result in transportation fuels consumption associated with vehicle trips generated by the proposed commercial and residential uses. Privately owned vehicles making trips to and from the Modified Project land uses would be subject to the CAFE and SAFE Vehicles regulations, as applicable. Parking facilities would include electric vehicle charging infrastructure to incentivize residents and patrons to transition away from reliance on fossil fuels. The location, design, and land uses associated with the Modified Project would reduce average vehicle trip lengths within the City by providing high-density, mixed-use development and attractive community destinations. The Modified Project would represent an infill development that would add diversity to the Downtown Core of the City, and improvements to the pedestrian network and provision of bicycle parking facilities would encourage active transportation. Therefore, the Modified Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### *(b) Would the Project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

The City's EECAP provides energy efficiency strategies that were approved by the City Council in 2015. These strategies include increasing energy efficiency in new residential units, commercial developments, and municipal buildings, as well as decreasing energy demand through reducing urban heat island effect.[15] The Modified Project would conform to CALGreen Code requirements, which mandates that new buildings to reduce water consumption, employ building commissioning to increase building system efficiencies for large buildings, divert construction waste from landfills, and install low pollutant-emitting finish materials. The Modified Project includes design standards that encourage the use of energy efficient designs, including the use of passive solar and ventilation techniques, the use of "green" materials in building design and planning, orienting most windows in the north-south direction, which is ideal for solar orientation, the use of solar panels for the generation of electricity and water heating, and the use of high energy efficiency exterior lighting fixtures. Solar powered exterior lighting fixtures are also encouraged.

The Modified Project would not impede SCE's trajectory of expanding its renewable energy portfolio to meet carbon-free electricity generation by 2045 and would be adequately served by existing utility infrastructure accessible at the Project Site. Additionally, the Modified Project would be consistent with the City's EECAP policies advancing energy efficiency through water conservation, building orientation to enhance passive solar heating, incorporating high efficiency interior and exterior lighting fixtures, and accommodating active transportation through improving the pedestrian network and providing bicycle parking throughout the Project Site. The Modified Project design would also increase density in the diverse Downtown Core, providing mixed-use and infill development within a currently under-utilized area. The bus depot would be capable of improving transit frequency and accessibility to encourage mode shift away from passenger vehicle trips. Therefore, the Modified Project would not result in wasteful, inefficient, or unnecessary consumption of energy resources during construction and operations and would not conflict with or obstruct state and local plans or regulations related to renewable energy or energy efficiency. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The assessment of potential environmental impacts related to energy resources for the Entertainment Retail Option is essentially identical to the discussion presented above for the Modified Project. The same suite of design features and diversity-enhancing infill development characteristics would also apply to the Entertainment Retail Option. Future operations would not impede SCE's initiatives to expand its renewable energy portfolio and improve energy efficiency throughout its service area. All building structures would comply with the provisions of 2025 Title 24 Energy Efficiency Standards and the CALGreen Code. Water conservation would be achieved through low-flow plumbing fixtures and drought-tolerant and native landscaping. The Entertainment Retail Option would not would not result in new or increased significant impacts beyond those identified in the Certified EIR.

## 3.6.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

[15] South Bay Cities Council of Governments, *City of Carson Climate Action Plan*, 2017.

### 3.6.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.6.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.6.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.7 GEOLOGY AND SOILS

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **GEOLOGY AND SOILS**. Would the project: | | | | | |
| (a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | | |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42. | No Impact | No | No | No | No |
| ii) Strong seismic ground shaking? | Less Than Significant | No | No | No | No |
| iii) Seismic-related ground failure, including liquefaction? | No Impact | No | No | No | No |
| iv) Landslides? | No Impact | No | No | No | No |
| b) Result in substantial soil erosion or the loss of topsoil? | Less Than Significant | No | No | No | No |
| c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse? | Less Than Significant With Mitigation | No | No | No | No |
| d) Be located on expansive soil as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property? | Less Than Significant With Mitigation | No | No | No | No |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | No Impact | No | No | No | No |
| f) Directly or indirectly destroy a unique paleontological resource or unique geologic feature? | Less Than Significant With Mitigation | No | No | No | No |

### 3.7.1 IMPACT DETERMINATION IN THE EIR

***(a.i) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?***

The Certified EIR stated that the Avalon-Compton Fault and the corresponding Alquist-Priolo Fault Zone run through the northeastern part of the City. However, the potential for seismic hazards due to fault rupture in Carson is relatively low because of the limited presence of known faults in the Planning Area. Although there is a potential for greater damage from potential earthquakes in the greater Southern California region and exposure to seismic risks cannot be completely eliminated, the General Plan Update's policies adhere to state and local regulations, such as California Building Code (CBC) requirements, to address these seismic hazards. Therefore, the Certified EIR concluded that the impact related to fault rupture would be less than significant.

***(a.ii) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving strong seismic ground shaking?***

The Certified EIR stated that earthquakes in and near the Planning Area have the potential to cause ground shaking of significant magnitude. If an earthquake were to occur, residents of the City could expect to feel potential ground shaking at a Modified Mercalli intensity of VII, very strong shaking with moderate damage, with a chance of damage at two to five percent. The General Plan Update would allow for additional development within the Planning Area, which could expose people and property to strong seismic ground shaking. However, all new buildings would be constructed in compliance with the CBC to resist the effects of earthquake motions. Additionally, the General Plan Update policies listed below would address any potential impacts associated with strong seismic ground shaking. Therefore, the Certified EIR concluded that the impact related to strong seismic ground shaking would be less than significant.

***(a.iii) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving seismic-related ground failure, including liquefaction?***

The Certified EIR stated that the City has several liquefaction hazard areas that are primarily located near water, primarily alluvial and former slough areas. A significant portion of the Planning Area has been designated as liquefaction hazard zones, and development in these areas requires a geotechnical investigation report as part of the environmental and building permit process. General Plan Update policies—such as Implementing Policy CSES-P-18, which requires that projects in areas of high liquefaction risk submit geotechnical investigation reports and demonstrate that the project conforms to all recommended mitigation measures prior to City approval—would address liquefaction potential by ensuring that sensitive or potentially hazardous facilities are prepared for a liquefaction event. Therefore, the Certified EIR concluded that the impact related to liquefaction would be less than significant.

***(a.iv) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving landslides?***

The Certified EIR stated that rapid erosion and landslides are most likely to occur on sloped areas. According to the California Geological Survey, the Planning Area does not contain any landslide hazard areas. Due to the relative absence of significant elevation changes in the City, slope instability is limited to the slopes adjacent to the flood control channels that intersect the City. The potential impacts from landslides on development of future land uses associated with the General

Plan Update would be addressed through site-specific geotechnical studies prepared in accordance with CBC requirements and standard industry practices, as needed, which would specifically address landslide hazards. Development would conform to the current design provisions of the CBC to mitigate losses from landslides. Therefore, the Certified EIR concluded the impact related to seismically-induced landslides would be less than significant.

***(b) Would the Project result in substantial soil erosion or the loss of topsoil?***

The Certified EIR stated that development anticipated by the General Plan Update would likely include earthwork activities that could expose soils to the effects of erosion or loss of topsoil. Once disturbed, either through removal of vegetation, asphalt, or an entire structure, stockpiled soils can be exposed to the effects of wind and water if not managed properly. The General Plan Update includes policies (listed below) that require the use of best management practices (BMPs) to control soil erosion during and after ground-disturbing activities and geotechnical reports for projects requiring grading permits. In addition, development that disturbs more than one acre would be subject to compliance with a National Pollutant Discharge Elimination System (NPDES) permit. Compliance includes the implementation of BMPs, some of which are specifically implemented to reduce soil erosion or loss of topsoil, and the implementation of a storm water pollution prevention plan (SWPPP) through the local jurisdiction. BMPs that are required under an SWPPP include erosion prevention measures that have proven effective in limiting soil erosion and loss of topsoil. Generally, once construction is complete and exposed areas are revegetated or covered by buildings, asphalt, or concrete, the erosion hazard is substantially eliminated or reduced. Therefore, the Certified EIR concluded that the impact related to soil erosion and topsoil loss would be less than significant with implementation of the General Plan Update policies listed below.

***(c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

The Certified EIR concluded that some development allowed under the General Plan Update could be located on geologic units or soils that are unstable, or that could become unstable, and result in geologic hazards if not addressed appropriately. Areas with underlying materials that include undocumented fills, soft compressible deposits, or loose debris could be inadequate to support development, especially multi-story buildings. Soils that exhibit expansive properties when exposed to varying moisture content over time could result in damage to foundations, walls, or other improvements. Structures, including residential units and commercial buildings, could be damaged as a result of settlement or differential settlement where structures are underlain by materials of varying engineering characteristics.

Construction of new structures in the vicinity of relatively steep slopes could provide additional loading causing landslides or slope failure from unstable soils or geologic units. Slope failure can occur naturally through rainfall or seismic activity, or through earthwork and grading-related activities. However, there is a relative absence of significant elevation changes within the City limits.

The potential hazards of unstable soil or geologic units would be addressed largely through the integration of geotechnical information in the planning and design process for projects to determine the local soil suitability for specific projects in accordance with standard industry practices and state-provided requirements, such as CBC requirements that are used to minimize the risk associated with these hazards. Geotechnical investigations would be required to thoroughly evaluate site-specific geotechnical characteristics of subsurface soils and bedrock to assess potential hazards and recommend site preparation and design measures to address any hazards which may be present. These measures are enforced through compliance with the CBC to address hazards relating to unstable soils and slope failure. Furthermore, policies included the General Plan Update

would address risk of exposure to geological hazards, including lateral spreading and landslide, by mandating site-specific geotechnical investigation and mitigation prior to development, and continually upgrading the City's geotechnical standards. The Certified EIR concluded that for these reasons, the impact related to hazards associated with unstable soils, such as landslide, lateral spreading, subsidence, liquefaction, or collapse, would be less than significant.

***(d) Would the Project be located on expansive soil, as defined in Table 18- 1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

The Certified EIR stated that soils that exhibit expansive properties when exposed to varying moisture content over time could result in damage to foundations, walls, or other improvements. Soils within the City generally have low to moderate shrink-swell potential, except for the Ramona clay loam, which has a high potential. Thus, development associated with the General Plan Update could include development occurring on soils considered to be expansive. The potential hazards of expansive soils would be addressed largely through the integration of geotechnical information in the planning and design process for projects to determine the local soil suitability for specific projects in accordance with standard industry practices and state-provided requirements, such as CBC requirements that regulate the analysis of expansive soils. Geotechnical investigations would be required to thoroughly evaluate site-specific geotechnical characteristics of subsurface soils to assess potential hazards and recommend site preparation and design measures to address any hazards which may be present. These measures are enforced through compliance with the CBC to address hazards relating to unstable soils. Furthermore, policies included in the General Plan Update would address risk of exposure to geological hazards, including expansive soils, by mandating site-specific geotechnical investigation and mitigation prior to development, and continually upgrading the City's geotechnical reporting standards. The Certified EIR concluded that for these reasons, the impact related to hazards associated with expansive soils would be less than significant.

***(e) Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

The Certified EIR stated that the entirety of the City is served by established wastewater conveyance and treatment services. Development allowed under the General Plan Update would connect to existing sewer trunk lines or future expansion of sewer trunk lines, and thus, would not require the use of septic tanks or alternative wastewater systems. The Certified EIR concluded that no impacts would occur.

***(f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

The Certified EIR stated that future development proposals initiated under the General Plan Update that include construction-related ground disturbance (e.g., grubbing/clearing, grading, excavation, trenching, and boring) into previously undisturbed soils are activities that have potential to destroy paleontological resources. Future development that does not require ground-disturbing activities would cause no impacts on paleontological resources. Other development activities that include ground disturbance of heavily disturbed soils or engineered artificial fill would also cause no impact on significant paleontological resources since they have likely been displaced from previous disturbances (such as the original/previous construction), and there is very limited to no potential to encounter intact and significant resources in disturbed soils. However, intact significant resources may be encountered beneath the depth of previous disturbances or in pockets of undisturbed soils within existing developments.

Anticipated development in the Planning Area would occur through infill development on vacant property, and through redevelopment or revitalization of underutilized properties, which could result in damage to paleontological resources located at or near previously undisturbed ground surfaces as result of construction-related ground disturbance. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of paleontological resources buried below the ground surface.

The Los Angeles County Natural History Museum of (LACM) has indicated that seven vertebrate localities from older Quaternary deposits have been recorded within the boundaries of the City and that several other localities from the same sedimentary deposits occur nearby. These fossil localities have yielded specimens of mammoth, camel, ray and dolphin at unknown depths and depths between 8 and 30 feet below surface. The LACM has also mentioned that grading or shallow excavations in the upper feet of the old lagoonal deposits (located at the surface in the northwest portion of the City) or the younger Quaternary Alluvium deposits (found in the central and eastern portions of the City) are unlikely to uncover fossil vertebrate remains. However, deeper excavations in the City reaching down into older Quaternary deposits, as well as excavations in older Quaternary deposits found at the surface have the potential for producing vertebrate fossils. Significant or unique paleontological resources have the potential to contribute to the geological and paleontological record of the region and may be of scientific importance to researchers. Any project that proposes ground disturbance could result in a significant impact on unique paleontological resources.

The General Plan Update policies listed below would help address the impact by requiring that project-specific paleontological studies be conducted for all future development that includes ground disturbance in previously undisturbed soils. Project-specific paleontological studies would include a site-specific database search through the LACM and/or other appropriate facilities; geologic map and scientific literature review; a pedestrian field survey (if deemed appropriate by the qualified professional paleontologist); assessment of the project area's paleontological sensitivity and paleontological monitoring requirements; and preparation of a technical report that documents the methods and results of the study. This paleontological study shall be prepared prior to approval of project plans. If the paleontological study determined that the project had a high potential for encountering subsurface paleontological resources, then the City would incorporate Policy OSEC-P-13 as a project condition of approval, which requires resource monitoring and provides protocols if a paleontological resource is unearthed. Therefore, the Certified EIR concluded that the impact related to unique paleontological resources would be less than significant with adherence to the regulatory requirements in the General Plan Update policies.

**General Plan Update Policies that Address Geology and Soils**

***Community, Services, Education and Safety***

*Guiding Policies*

CSES-G-10 Proactively minimize risk of seismic and geologic hazards to the property and lives of Carson residents, businesses, and visitors.

CSES-G-11 Seek to reduce potential damage to property and repercussions from damaged heavy industrial facilities due to seismic hazards.

*Implementing Policies*

CSES-P-17 Maintain updated maps of known seismic and other geologic hazards such as fault lines to inform land use decisions and monitor the threat of future seismic activity to existing development, especially areas with heavy industrial uses or refineries.

CSES-P-18 In areas of high liquefaction risk (see Carson General Plan 2040 Figure 7-4), require that project proponents submit geotechnical investigation reports and demonstrate that the project conforms to all recommended mitigation measures prior to City approval. Ensure that sensitive or potentially hazardous facilities, such as refineries, heavy industrial, or former landfills, are prepared for a liquefaction event and designed to mitigate hazardous material releases.

CSES-P-19 Given that a known fault line crosses SR-91, prepare for transportation and infrastructure impacts if a seismic event were to occur.

CSES-P-20 Continue to enforce rules and regulations on designing buildings to the current seismic standards and ensure that erosion is controlled through drainage and grading plans and that all geotechnical design requirements for projects are adhered to.

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-6 Identify, protect, and preserve important archaeological, paleontological, tribal, and historic resources for their aesthetic, scientific, educational, and cultural values.

*Implementing Policies*

OSEC-P-12 Prior to development of projects that involve ground disturbance or excavations in undisturbed native soils, the project proponent shall retain a paleontologist meeting the Society of Vertebrate Paleontology's standards for qualified professional paleontologist to conduct a paleontological resources assessment including: a site-specific database search at the Natural History Museum of Los Angeles County and/or other appropriate facilities; geologic map and scientific literature review; a pedestrian field survey, where deemed appropriate by the qualified professional paleontologist; assessment of the project area's paleontological sensitivity and paleontological monitoring requirements; and preparation of a technical report that documents the methods and results of the study. The report shall be prepared prior to the City of Carson's approval of project plans.

OSEC-P-13 The City shall require paleontological resources monitoring for any project that has a high potential for encountering subsurface paleontological resources. The location, depths, duration, and timing of monitoring shall be determined by the qualified professional paleontologist based on the sensitivity assessment required as part of OSEC-P-12. Prior to the start of ground disturbance, the project proponent shall retain a qualified monitor meeting the Society of paleontological resource monitors, and who shall work under the direct supervision of the qualified professional paleontologist. In the event that paleontological resources are unearthed during ground-disturbing activities, the monitor shall be empowered to halt or redirect ground-disturbing activities away from the vicinity of the discovery until the qualified professional paleontologist has determined its significance and provided recommendations for preservation in place or recovery of the resource. The monitor shall keep daily logs detailing the types of activities and soils observed, and any discoveries. After cessation of ground disturbance, the qualified professional paleontologist shall prepare a report that details the results of monitoring.

OSEC-P-15 Continue working with the Los Angeles RWQCB in implementation of the National Pollutant Discharge Elimination System (NPDES) program. As part of the NPDES permitting process, require developments to incorporate structural and non-structural best management practices (BMPs) to mitigate or reduce the projected increases in

pollutant loads. Do not allow post development runoff from a site that would cause or contribute to an exceedance of receiving water quality objectives or has not been reduced to the maximum extent practicable.

OSEC-P-16 Prepare and implement applicable plans such as a Water Quality Improvement Plan, Integrated Regional Water Management Plan, Load Reduction Plan or others as needed to comply

**Mitigation Measures**

None required.

### 3.7.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a.i) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?***

According to the California Department of Conservation Earthquake Zones of Required Investigation, the Project Site is not located within the Alquist-Priolo Special Studies Zone, and no trace of any known active or potentially active fault passes through the Project Site.[16] The Modified Project does not involve any activities that would potentially exacerbate existing environmental conditions so as to increase the potential to expose people or structures to the rupture of a known earthquake fault. The type of development proposed is typical of urban environments and would not involve deep excavation into the Earth or boring of large areas creating unstable seismic conditions or stresses in the Earth's crust that would result in the rupture of a fault. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be located on the same site as the Modified Project. The Entertainment Retail Option does not involve any activities that would potentially exacerbate existing environmental conditions so as to increase the potential to expose people or structures to the rupture of a known earthquake fault. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a.ii) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving strong seismic ground shaking?***

As with all properties in the seismically active Southern California region, the Project Site is susceptible to ground shaking during a seismic event. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. The Modified Project does not involve activities that would increase the potential to expose people or structures to the adverse effects associated with strong seismic ground shaking. Additionally, the design and construction of the proposed buildings are required to conform to California Building Code (CBC) seismic standards, as well as all other applicable codes and

[16]California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2025.

standards to reduce impacts from strong seismic ground shaking. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be located on the same site as the Modified Project. The Entertainment Retail Option does not involve any activities that would potentially exacerbate existing environmental conditions so as to increase the potential to expose people or structures to the adverse effects associated with strong seismic ground shaking. Proposed structures associated with the Entertainment Retail Option would be required to conform to CBC seismic standards and all other applicable codes and standards to reduce impacts from strong seismic ground shaking. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a.iii) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving seismic-related ground failure, including liquefaction?***

According to the California Department of Conservation's Earthquake Zones of Required Investigation, a majority of the Project Site is within a liquefaction hazard zone. The western portion of the Project Site that encompasses a portion of the surface parking lot, landscaping to the east of the existing City Hall, and the western end of City Hall is not within a liquefaction hazard zone. The remaining portion of the Project Site is within a liquefaction hazard zone.[17] Section 1803 of the CBC requires a project-specific geotechnical investigation report to be conducted. Additionally, the City requires a geotechnical investigation report to be conducted as part of the environmental and building permit process for development that are proposed in liquefaction hazard zones. The Modified Project would be required to implement the recommendations identified in the geotechnical report to ensure that future structures on the Project Site would be constructed to withstand seismic-related ground failures, including liquefaction. The Modified Project would be constructed in accordance with the CBC, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be located on the same site as the Modified Project. As with the Modified Project, a project-specific geotechnical report would be prepared. The Entertainment Retail Option would be required to implement the recommendations in the geotechnical report and comply with applicable regulations of the CBC. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a.iv) Would the Project directly or indirectly cause potential substantial adverse effects, including the risk or loss, injury or death involving landslides?***

According to the California Department of Conservation's Earthquake Zones of Required Investigation, the Project Site is not located within an earthquake-induced landslide area.[18] Additionally, there is no evidence of recent or historic landslides affecting the Project Site or its

[17]California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2025.

[18]California Department of Conservation, *Earthquake Zone of Required Investigation*, https://maps.conservation.ca.gov/cgs/EQZApp/app/, accessed March 2025.

surrounding area. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be located on the same site as the Modified Project, which is not within an earthquake-induced landslide area. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project result in substantial soil erosion or the loss of topsoil?***

During ground disturbing activities, such as grading, the Project Site could potentially be subject to soil erosion or loss of topsoil. However, the Modified Project would be required to comply with local, state, and federal regulations and standards related to minimizing potential erosion impacts, including the latest requirements of the City-enforced NPDES Construction General Permit, BMPs, and applicable pollution control and erosion protection measures pursuant to the City's Storm Water Management and Discharge Control Ordinance (CMC Chapter 8). As required by the NPDES Construction General Permit, development on the Project Site would be required to prepare an SWPPP, which the City would review and approve prior to issuing any grading or building permit of the Modified Project. The SWPPP would include BMPs to control sedimentation and erosion Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would be required to comply with the NPDES Construction General Permit, implement BMPs, prepare an SWPPP, and comply with the City's Storm Water Management and Discharge Control Ordinance, all of which would control sedimentation, erosion, and loss of topsoil. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?***

As discussed in the response to Checklist Questions 3.7.2(a.iii) and 3.7.2(a.iv), above, the Project Site is within a liquefaction hazard zone but not within an earthquake-induced landslide area, respectively. The Project Site and the surrounding area do not have any steep slopes or embankments nearby and, thus, are not susceptible to landslides. The Modified Project would not create hazards associated with liquefaction or lateral spreading because the Modified Project does not involve activities that would affect seismic conditions or alter underlying soil or groundwater characteristics that govern liquefaction or lateral spreading potential. Section 1803 of the CBC requires a site-specific geotechnical investigation report to be conducted, and the City requires a geotechnical investigation report to be conducted as part of the environmental and building permit process for development that are proposed in liquefaction hazard zones. The Modified Project would be required to implement the recommendations identified in the geotechnical investigation report to ensure that the structures on the Project Site can withstand the geologic unit and soil conditions of the Project Site. Additionally, the Modified Project would be constructed in accordance with all applicable provisions of the latest CBC, which is designed to ensure safe construction and includes building foundation requirements appropriate to site conditions.

Subsidence and ground collapse generally occur in areas with active groundwater withdrawal or petroleum production. The extraction of groundwater or petroleum from sedimentary source rocks can cause the permanent collapse of the pore space previously occupied by the removed fluid. The

compaction of subsurface sediments by fluid withdrawal will cause subsidence or ground collapse overlying a pumped reservoir. The Project Site and its vicinity do not contain any subsurface oil extraction facilities or groundwater withdrawal activities. The historically highest groundwater levels on the Project Site is approximately 20 feet below ground surface. As several levels of subterranean parking would be constructed on the Project Site, groundwater could potentially be encountered during excavation and construction activities. Dewatering may be necessary to prevent structural damage and foundation issues if construction of the subterranean parking garages reaches to the depth of groundwater on the Project Site. In accordance with Section 1803 of the CBC, a site-specific geotechnical investigation report would be conducted to determine the current groundwater level on the Project Site and whether dewatering would be necessary. The Modified Project would be required to implement the recommendations identified in the geotechnical report to ensure that the subterranean parking garages would be structurally stable, would not cause or trigger subsidence, and would not adversely affect soil stability.

The Modified Project would be constructed in accordance with the CBC and would comply with the recommendations contained within the project-specific geotechnical report. Thus, the Modified Project would not cause or exacerbate existing conditions associated with landslides, lateral spreading, subsidence, liquefaction, or collapse. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would be required to comply with the CBC. It would also be required to prepare and implement the recommendations contained within the project-specific geotechnical report. Thus, the Entertainment Retail Option would not cause or exacerbate existing conditions associated with landslides, lateral spreading, subsidence, liquefaction, or collapse. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

According to the Seismic Hazard Zone Report for the Torance Quadrangle, a majority of the Project Site is covered by younger alluvium consisting of soft silt and clay with some loose to moderately dense silty sand. The western portion of the Project Site that encompasses a portion of the surface parking lot, landscaping to the east of the existing City Hall, and the western end of City Hall is covered by older alluvium consisting of dense to very dense sands and silty sands. Given that clay covers a majority of the Project Site, structures on the Project Site have the potential to be located on expansive soil. In accordance with Section 1803 of the CBC, a site-specific geotechnical investigation report would be conducted, and the recommendations identified within the geotechnical investigation report would be implemented to ensure that the structures on the Project Site can withstand the geologic unit and soil conditions of the Project Site. Additionally, the Modified Project would be required to comply with all applicable building codes and standards, including the CBC, which is designed to assure safe construction and includes building foundation requirements appropriate to site conditions. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would be required to comply with the CBC. It would also be required to prepare and implement the recommendations contained within the project-specific geotechnical report. Thus, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(e) Would the Project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?***

The Project Site is fully developed and located in an urbanized area of the City where wastewater infrastructure is currently in place. The Modified Project would connect to the existing sanitary sewer system that serves the Project Site and would not use septic tanks or alternative wastewater disposal systems. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option is located on the same Project Site as the Modified Project, which is served by an existing sanitary sewer system. The Entertainment Retail Option would not use septic tanks or alternative wastewater disposal systems. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(f) Would the Project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

As previously mentioned in the response to Checklist Question 3.7.2(d), a majority of the Project Site is covered by younger alluvium, and the western portion of the Project Site that encompasses a portion of the surface parking lot, landscaping to the east of the existing City Hall, and the western end of City Hall is covered by older alluvium. As previously explained in the response to Checklist Question 3.7.2(f), younger Quaternary deposits are not known for being fossiliferous in the uppermost layers; however, these deposits are underlain by older Quaternary deposits, which have produced an assortment of vertebrate fossil localities. Paleontological resources may be present in fossil-bearing soils and rock formations below the ground surface. Ground-disturbing activities in fossil-bearing soils and rock formations have the potential to damage or destroy paleontological resources that may be present below the ground surface. Although LACM indicated that grading or shallow excavations in the younger Quaternary Alluvium deposits are unlikely to uncover fossil vertebrate remains, deeper excavations reaching down into older Quaternary deposits, as well as excavations in older Quaternary deposits found at the surface have the potential for producing vertebrate fossils.[19]

The LACM database search for records of fossil localities that was conducted on September 25, 2017 as part of the City's General Plan Update. Search did not identify any fossil localities within the Project Site.[20]

The Project Site is located in an urbanized area that has been subject to previous grading and development. Unique paleontological resources or unique geologic features were not encountered under previous grading and development activities. Any unique paleontological resources or unique geological features that may have been present at one time have likely been destroyed. Additionally, the Project Site is not located near the shore of a prehistoric lakebed, streambed, or other indicators for paleontological fossils. Therefore, the likelihood of encountering unique paleontological resources or unique geologic features is considered remote. Nevertheless, the Modified Project would construct several levels of subterranean parking, and ground-disturbing activities have the potential to disturb native soil that has not been previously disturbed. Intact paleontological resources could potentially be encountered beneath the depth of previous

[19]City of Carson, *Carson 2040 General Plan Update Draft Environmental Impact Report*, SCH #2001091120, September 2022.

[20]City of Carson, *Carson 2040 General Plan Update Draft Environmental Impact Report*, SCH #2001091120, September 2022.

disturbances during ground disturbance. As with other development projects in the City, future development on the Project Site would be required to comply with the regulatory requirements in General Plan Update policies OSEC-P-12 and OSEC-P-13 if the Project would involve ground disturbance or excavations in undisturbed native soil. These General Plan Update policies would ensure that development associated with the Modified Project would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option is located on the same Project Site as the Modified Project and would involve similar types of construction activities, which include excavation activities for subterranean parking garages. As with the Modified Project, development associated with the Entertainment Retail Option would also be required to comply with the regulatory requirements in General Plan Update policies OSEC-P-12 and OSEC-P-13 if the Project would involve ground disturbance or excavations in undisturbed native soil. These General Plan Update policies would ensure that future development would not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.7.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.7.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.7.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.7.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.8 GREENHOUSE GAS EMISSIONS

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **GREENHOUSE GAS.** Would the project: | | | | | |
| (a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | Less Than Significant | No | No | No | No |
| (b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | Less Than Significant | No | No | No | No |

## 3.8.1 IMPACT DETERMINATION IN THE EIR

***(a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

***(b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

### *Construction*

As discussed in the Certified EIR, the General Plan Update is a planning document, the approval of which would not directly result in the development of land uses and would not directly result in GHG emissions. Future GHG emissions may result from new development that could occur from adoption of the General Plan Update. Construction of future new development has the potential to generate GHG emissions through the use of heavy-duty construction equipment and through vehicle trips generated by construction workers and haul trips traveling to and from each specific Project Site. Construction emissions can vary substantially from day to day, depending on the level of activity and the specific type and amount of equipment. However, as there are no specific projects approved or proposed under the General Plan Update, and there is no knowledge as to timing of construction, location or the exact nature of future projects, analysis of construction emissions would be speculative at best.

Information regarding specific development projects, including specific buildings and facilities to be constructed, construction schedules, quantities of grading, and other information would be required in order to provide a meaningful estimate of emissions. Since this information is unknown, emissions modeling is not feasible. Each future project developed under the General Plan Update would be required to comply with applicable U.S. EPA, CARB and SCAQMD emissions standards, rules, and regulations, as well as conduct their own applicable CEQA analysis and would determine significance based on the individual project specifics. Furthermore, future construction activities under the General Plan Update would be required to comply with the CARB Air Toxics Control Measure, which limits diesel powered equipment and vehicle idling to no more than five minutes at a location (13 California Code of Regulations Section 2485), CARB In-Use Off-Road Diesel Vehicle regulation, CARB Truck and Bus regulation, SAFE Vehicle Rule (or its successor rule), and CARB Advanced Clean Car and Advanced Clean Trucks regulations, all of which support the goals of the CARB Climate Change Scoping Plan by requiring construction equipment and vehicle fleet

operators to repower or replace higher-emitting equipment with less polluting models, including zero- and near-zero-emissions on-road vehicle and truck technologies as they become developed and commercially available. Mandatory compliance with these rules and regulations would reduce GHG emissions, including fuel combustion emissions of carbon dioxide ($CO_2$), methane ($CH_4$), and nitrous oxide ($N_2O$), during future construction activities under the General Plan Update.

### *Operation*

The Certified EIR stated that operation of future development under the General Plan Update would generate emissions of GHG emissions from vehicle trips traveling within the City, energy sources such as electricity demand and natural gas combustion, area sources such as fireplaces and landscaping equipment, water conveyance and distribution, wastewater treatment, and solid waste decomposition. The net change in operational emissions from existing conditions compared to existing plus buildout of new development under the General Plan Update at 2040 buildout would be negative compared to existing conditions primarily due to the focus of the General Plan Update on infill development and revitalization to help the City achieve an integrated land use mix that accommodates growth while reducing VMT and associated emissions, improvements in vehicle emissions standards and, to a lesser extent, improvements in building energy efficiency standards. Development of future new residential and non-residential uses would be based on market demand and would be constructed over the buildout duration through 2040.

The General Plan Update policies, listed below, would reduce potential emissions from existing and future new development. In addition, future new development under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on the individual project specifics. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require mitigation.

### *Greenhouse Gas Reduction Plans, Policies, and Regulations*

**2017 Climate Change Scoping Plan.** The General Plan Update would not conflict with state plans and regulatory requirements referenced in the 2017 Climate Change Scoping Plan, the purpose of which is to reduce statewide GHG emissions to 40 percent below 1990 levels by 2030. The 2017 Climate Change Scoping Plan outlines a framework that relies on a broad array of GHG reduction actions, which include direct regulations, alternative compliance mechanisms, incentives, voluntary actions, and market-based mechanisms such as the Cap-and-Trade program and builds off of a wide array of regulatory requirements that have been promulgated to reduce statewide GHG emissions, particularly from energy demand and mobile sources. According to the 2017 Climate Change Scoping Plan, reductions needed to achieve the 2030 target are expected to be achieved by increasing the RPS to 50 percent of the state's electricity by 2030, increasing the fuel economy of vehicles and the number of zero-emission or hybrid vehicles, reducing the rate of growth in VMT, supporting high speed rail and other alternative transportation options, and increasing the use of high efficiency appliances, water heaters, and HVAC systems.

The Certified EIR included a detailed analysis of the General Plan Update's consistency with the strategies outlined in the state's Climate Change Scoping Plan to reduce GHG emissions. The analysis concluded that the General Plan Update would not conflict with applicable 2017 Climate Change Scoping Plan strategies and regulations to reduce GHG emissions.

**Policy Executive Order S-3-05.** Even though the state has not developed a clear regulatory and technological roadmap to achieve the statewide 2050 GHG emissions reduction goal of 80 percent below 1990 levels, it has demonstrated the potential pace at which emission reductions can be achieved through new regulations as well as technology and market developments. As part of the

2017 Climate Change Scoping Plan, CARB, CEC, CPUC, and the California Independent System Operator (CAISO) commissioned a study that evaluates the feasibility and cost of meeting the 2030 target along the way to reaching the state's 2050 GHG emissions reduction goal. The California State Agencies' PATHWAYS project explores scenarios for meeting the state's long-term GHG emissions target, which affects all sectors of the California economy with detailed representations of the buildings, industry, transportation, and electricity sectors. The PATHWAYS study acknowledges the inherent uncertainty associated with its modeling assumptions and emphasizes the need for continued action and policy development by the state to support the development of low-carbon technologies and markets for energy efficiency, building electrification, renewable electricity, zero-emission vehicles, and renewable fuels.

The PATHWAYS study was updated in 2018 and concludes that market transformation is needed to reduce the capital cost and to increase the range of options available in order to achieve high levels of consumer adoption of zero carbon technologies, particularly of electric vehicles and energy efficiency and electric heat in buildings. The PATHWAYS study suggests that market transformation can be facilitated by: (1) higher carbon prices (which can be created by the Cap and Trade and low carbon fuel standard (LCFS) programs); (2) adoption of codes and standards, regulations, and direct incentives to reduce the upfront cost to the customer; and (3) business and policy innovations to make zero-carbon technology options the more affordable and preferred solutions compared to fossil fueled alternatives. It is reasonable to expect the GHG emissions from future development anticipated by the General Plan Update would decline over time, as the regulatory initiatives identified by CARB in the 2017 Climate Change Scoping Plan and future updates to the Scoping Plan are developed and implemented, along with other technological innovations and market developments that occur. Given the reasonably anticipated decline in emissions, the Certified ERIR concluded that the General Plan Update would not conflict with or interfere with the ability of the state to achieve the 2050 horizon-year goal of EO S-3-05.

**2020–2045 Regional Transportation Plan/Sustainable Communities Strategy.** The purpose of the 2020–2045 RTP/SCS is to achieve the regional per capita GHG reduction targets for the passenger vehicle and light-duty truck sector established by CARB pursuant to SB 375. SCAG's Program EIR for the 2020–2045 RTP/SCS, certified on May 7, 2020, states that "[e]ach [metropolitan planning organization] is required to prepare an SCS as part of their RTP in order to meet these GHG emissions reduction targets by aligning transportation, land use, and housing strategies with respect to [Senate Bill] 375." The 2020–2045 RTP/SCS seeks improved mobility and accessibility, which is defined as "the ability to reach desired destinations with relative ease and within a reasonable time, using reasonably available transportation choices."

The 2020–2045 RTP/SCS seeks to implement strategies that "alleviates development pressure in sensitive resource areas by promoting compact, focused infill development in established communities with access to high-quality transportation." Furthermore, the 2020–2045 RTP/SCS includes "more compact, infill, walkable and mixed-use development strategies to accommodate new region's growth" and "accommodate increases in population, households, employment, and travel demand." Moreover, the 2020–2045 RTP/SCS states that while "[t]ransportation emissions are most prevalent relative to all other sectors in California and specifically in the SCAG region," the RTP/SCS would focus "growth in existing urban regions and opportunity areas, where transit and infrastructure are already in place. Locating new growth near bikeways, greenways, and transit would increase active transportation options and the use of other transit modes, thereby reducing number of vehicle trips and trip lengths and associated emissions."

In order to assess the General Plan Update's potential to conflict with the 2020–2045 RTP/SCS, the Certified EIR included a detailed analysis of the General Plan Update's consistency with the strategies and policies set forth in the 2020–2045 RTP/SCS to meet GHG emission-reduction targets set by CARB. Generally, projects are considered to not conflict with applicable City and

regional land use plans and regulations, such as SCAG's 2020–2045 RTP/SCS, if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The Certified EIR concluded that the General Plan Update would not conflict with the 2020–2045 RTP/SCS goals.

**City of Carson Energy Efficiency Climate Action Plan.** Through the City's EECAP, the City has established goals and strategies that would reduce GHG emissions.[21] The EECAP reduction measures primarily focus on ways to reduce energy as energy usage accounted for 70 percent of all City GHG emissions in 2012. As outlined in the EECAP, the City is focusing on increasing energy efficiency and reducing GHG emissions from energy to meet attainment goals. In addition to EECAP energy efficiency goals, utility providers (such as SCE) are required to provide 60 percent of their electricity supply from renewable sources by the year 2030, further reducing the demand on nonrenewable sources.

The City's EECAP identifies community-wide strategies to lower energy use. Energy reductions within the EECAP are from transportation, land use, energy generation and consumption, water consumption and waste generation. The General Plan Update incorporates EECAP goals and policies for energy efficiency and renewable energy, including electric vehicle charging, which would source transportation energy from renewable sources in accordance with the RPS.

Future development that could occur under the General Plan Update would comply with CALGreen energy-efficiency requirements, which would be consistent with EECAP goals for increasing energy and water use efficiency in new residential and commercial developments. Thus, new development under the General Plan Update would incorporate EECAP goals and policies as part of future development approvals and would not result in conflicts with the plan.

Through the City's EECAP, the City has established goals and strategies that would reduce energy use. The EECAP focuses on increasing energy efficiency and reducing GHG emissions from energy to meet attainment goals. In addition to EECAP energy efficiency goals, utility providers (such as SCE) are required to provide 60 percent of their electricity supply from renewable sources by the year 2030 per SB 100, further reducing the GHG intensity of supplied electricity. New development under the General Plan Update would comply with CALGreen energy-efficiency requirements, which would be consistent with EECAP goals for increasing energy and water use efficiency in new residential and commercial developments. The Certified EIR concluded that based on the information above, new development under the General Plan Update would comply with plans, policies and regulations for reducing GHG emissions and this impact would be less than significant.

**General Plan Update Policies that Address Greenhouse Gas**

***Land Use and Revitalization***

*Guiding Policies*

LUR-G-2 Balance employment and housing within the community to provide more opportunities for Carson residents to work locally, cut commute times, and improve air quality.

LUR-G-4 Promote a diversity of complementary uses in different parts of the City, including mixed flexible office space, retail, dining, residential, hotels, and other compatible uses, to foster vibrant, safe, and walkable environments, with flexibility to accommodate emerging uses and building typologies.

[21] City of Carson, *Energy Efficiency Climate Action Plan*, December 2015.

LUR-G-6 Encourage revitalization of corridors as pedestrian-oriented, mixed-use residential, retail, and office community spines, serving as focal points for neighborhood amenities and services, and helping foster neighborhood identity and vitality.

LUR-G-7 Develop Carson's central Core—extending approximately 1.7 miles both eastwest along West Carson Street and north-south along Avalon Boulevard and including the South Bay Pavilion—into a vibrant, pedestrian-oriented mixeduse hub of the community, with housing, retail, and other commercial uses, and civic uses and community gathering spaces.

LUR-G-9 Locate medium and high-density development along major corridors and major re-development sites in the central Core, to focus housing near regional access routes, transit stations, employment centers, shopping areas, and public services.

LUR-G-11 Encourage mixed-use development (two or more uses within the same building or in close proximity on the same site), especially in the Core area, to promote synergies between uses.

*Implementing Policies*

LUR-P-1 Where feasible, locate higher density residential uses in proximity to job centers and commercial centers in order to discourage long commute times and encourage pedestrian traffic and provide a consumer base for commercial uses.

LUR-P-8 Promote development of neighborhood-scaled commercial centers in residential areas to serve the everyday needs of nearby residents.

LUR-P-11 Promote ground level commercial uses to foster pedestrian activity and visual engagement and provide commercial uses to serve residents of surrounding neighborhoods. Where commercial uses are or were present as of 2021, at least half of the commercial area shall be retained or replaced as part of new development. Where more than 0.1 FAR ground level active commercial uses are provided (new or through replacement), the City may grant residential density increase up to 60 percent on a graduated scale as specified in the Zoning Ordinance and Table 2-2.

LUR-P-12 Prohibit uses in the Core (as shown in Figure 2-3) that do not add to a strong pedestrian character, such as warehouses, gas stations, drive-through establishments, industrial, and other new development whose design prioritizes automobile access.

LUR-P-13 Focus new residential, commercial and employment-generating land uses along Carson Street and Avalon Boulevard in order to support higher-frequency transit service. Provide adequate infrastructure, such as bus lanes or bus shelters at bus stops, to support transit service usage.

LUR-P-16 Where larger parcels—such as the Shell site—are redeveloped, require development to implement urban design policies, including creation of smaller blocks (typically with no dimension larger than 300 to 600 feet dependent on use, with smaller blocks in residential areas) to create walkable, urban environments; buildings and landscapes that relate to the surroundings, with high-level of public-realm amenities, such as tree-lined streets; sidewalks, pedestrian paths, and crossings; and plazas and other gathering spaces for workers and visitors. Site planning for new construction should ensure that streets are lined with occupied buildings or landscapes, with parking and service facilities tucked behind or away from public streets.

LUR-P-18 Promote infill mixed-use development in either a vertical or horizontal configuration when aging shopping centers are redeveloped to create mixed-use corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.

LUR-P-24 Promote the development of sites designated as Business Residential Mixed Use (BRMU) with a vibrant mix of business and residential uses that include:

- For the Shell site, require at least a minimum of 25 acres of open space, 18 of which as a centralized park or open space and seven acres along the western border of the property as a Greenway Corridor/buffer. Exact locations and acreages should be specified during project planning.
- For the Shell site, require at least a minimum nine acres of General Commercial at the south-west corner of Del Amo Boulevard and Wilmington Avenue or at a centralized location. Other commercial uses are encouraged throughout the site as mixed-use development.
- Encourage residential development with a range of housing types, and technology, research and development, and office uses if determined to be suitable from an environmental perspective.
- Require development to be connected to the surroundings, with through streets, and walkable urban design patterns. See additional policies in Chapter 4: Community Character, Identity, and Design Element.
- When housing is proposed adjacent to industrial uses, require the development of a cohesive master or specific plan to include surrounding property owners to ensure compatibility. The Shell site is required to have a similar plan to outline long-term growth of the site.

***Circulation Element***

*Guiding Policies*

CIR-G-1 Provide a balanced transportation system of multimodal networks providing a broad range of travel options to make transportation convenient, comfortable, and safe for people of all abilities.

CIR-G-2 Promote bicycling and walking, and support and improve connections to local and regional transit service.

CIR-G-3 Manage the transportation network to minimize roadway congestion, while balancing traffic Level of Service (LOS) objectives with promoting reduction in vehicle miles traveled and considerations of community character and design.

CIR-G-4 Encourage the development of a multimodal freight transportation system that balances the need for effective and efficient transportation of goods with the health and wellbeing of the community.

*Implementing Polices*

CIR-P-1 Update the City's Bicycle Plan, identifying a citywide bicycle network of offstreet bike paths, on-street bike lanes and bike streets. As part of the plan, consider bicycle lockers, secure bike parking, pavement condition, and access to transit, parks, and schools throughout the City. The update of the Bicycle Plan should strategically identify projects that will improve equity, the environment, reduce trips on the roadway

system, and prioritize projects that align with primary local active transportation grant funding programs including Metro, SCAG, and Caltrans.

CIR-P-2 Develop a First Last Mile Plan to improve walking and biking connections to future and existing transportation hubs.

CIR-P-3 Establish bike hubs (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes), at key transit nodes or commercial nodes.

CIR-P-4 Evaluate opportunities, such as new development or changes to the transit network, to enhance existing and proposed Class II bike lanes and Class III bike routes to protected bike lanes and bike routes to bike lanes or bike boulevards.

CIR-P-16 Work with Long Beach Transit to serve local neighborhoods and connect residences with shopping, employment, transit, and recreational opportunities.

CIR-P-17 Participate in and encourage collaboration among adjacent cities to provide a more reliable public transportation system the area.

CIR-P-19 Work with regional transit services to develop an on-demand transportation system that caters to senior populations and people with disabilities.

CIR-P-20 Evaluate and adjust transit routes to better connect disadvantaged communities with major transit hubs and key destinations such as parks, schools, and healthy food opportunities.

CIR-P-21 Work with transit providers in the City to implement public transportation improvements and enhance first-last mile connections at highly utilized transit stops.

CIR-P-22 Develop a transportation demand management (TDM) ordinance. A TDM ordinance would incorporate strategies appropriate for the local context and land use as different strategies are more effective at reducing employee commute trips, while others focus on reducing residential, shopping, or other discretionary trips. Strategies will generally focus on land use, parking, transit, and active transportation.

CIR-P-23 Pursue the implementation of TDM strategies through application of the City's Transportation Study Guidelines and compliance with Senate Bill 743 that seeks to reduce per capita VMT for residential, retail, and office trips.

CIR-P-24 Encourage local public agencies and employers to implement TDM policies that promote VMT reductions. The research in this area is regularly evolving and can help identify viable and defensible VMT reduction strategies.

CIR-P-25 Evaluate the potential for strategies that can reduce VMT such as citywide bike-sharing, promote car-sharing and other electrified modes as options to reduce traffic congestion.

CIR-P-26 Prioritize and identify disadvantaged community locations to develop sustainable mobility hubs that include car-sharing, bike-sharing and public EV charging infrastructure to minimize traffic and air quality effects.

IR-P-27 Require all new and substantially renovated office, retail, industrial, and multifamily developments to provide EV charging infrastructure and EV ready parking.

CIR-P-32 Enhance infrastructure to accommodate last mile delivery services for low carbon solutions, such as last mile bicycle delivery.

CIR-P-33 Promote the deployment of near-zero and zero-emissions trucks for urban deliveries, port drayage trips, regional, and long-haul trips by providing charging infrastructure and plug-in technologies for extended idling.

CIR-P-34 Encourage deployment of alternative-fueled vehicles through advancement of new technologies, such as autonomous vehicles that are anticipated to be a pathway to electric vehicles.

***Community Health and Environmental Justice***

*Guiding Policies*

CHE-G-8 Improve bike, pedestrian, and transit connectivity to community facilities and services, especially in underserved areas.

CHE-P-5 Recognize and actively promote policies to create a multimodal transportation system that reduces solo driving.

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-19 Seek to reduce mobile sources of air pollution by creating denser and walkable neighborhoods, promoting transit-oriented development, and improving bicycle infrastructure, with the goal to reduce the number of miles traveled in cars and improve regional air quality.

OSEC-G-22 Promote clean and alternative fuel combustion in City-owned mobile equipment and vehicles.

OSEC-G-23 Undertake initiatives outlined in the Climate Action Plan to enhance sustainability by reducing the community's greenhouse gas (GHG) emissions and fostering green development patterns—including buildings, sites, and landscapes.

OSEC-G-24 Incorporate green infrastructure design in new projects to promote sustainability in the built environment. Green infrastructure is the use of open spaces, permeable pavement, street tree rain gardens, and other natural approaches to capture infiltrate, and reuse rainwater. As opposed to single-purpose gray stormwater infrastructure—conventional piped drainage and water treatment systems—which is designed to move urban stormwater away from the built environment, green infrastructure reduces and treats stormwater at its source thus reducing strain on infrastructure while delivering environmental, social, and economic benefits.

OSEC-G-25 Demonstrate leadership by reducing the use of energy and fossil fuel consumption in municipal operations, including transportation, waste and water reduction, recycling, and by promoting efficient building design and use.

OSEC-G-26 Plan for extreme weather events by incorporating the potential effects and threats of climate change into emergency management planning.

OSEC-G-27 Reduce the impacts of extreme heat events resulting from global warming and climate change by diminishing urban heat island effects. Explore heat mitigation strategies including planting trees, limiting the use of heat-absorbing pavement, encouraging use

of cool roofs and reflective pavements, and providing cooling elements in public spaces such as shade structures and water features.

Heat islands are urbanized areas that experience higher temperatures than outlying areas. Structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Urban areas, where these structures are highly concentrated and greenery is limited, become "islands" of higher temperatures relative to outlying areas. Daytime temperatures in urban areas are about 1–7°F higher than temperatures in outlying areas and nighttime temperatures are about 2-5°F higher.

OSEC-G-28 Promote sustainable practices and environmental remediation for heavy industrial areas and seek to reduce trucking emissions.

*Implementing Policies*

OSEC-P-34 Continue to encourage and assist employers in developing and implementing work trip reduction plans, employee ride sharing, modified work schedules, preferential carpool and vanpool parking, or any other trip reduction approach that is consistent with the SCAQMD.

OSEC-P-43 Support SCAQMD efforts to reduce transportation-related emissions, including electric charging requirements for buildings including warehouses and truck idling restrictions.

OSEC-P-46 Continue to implement strategies to reduce government operation emissions, including City employee work trip reduction programs, work from home options, and use of alternative fuel vehicles. Strive to have the City-owned vehicle fleet to be 100 percent electric or alternative fuel by 2040 or sooner.

OSEC-P-49 Use the City's development review process and the California Environmental Quality Act (CEQA) regulations or strategies and measured outlined in the CAP to evaluate and mitigate the local and cumulative effects of new development on air quality and GHG emissions.

OSEC-P-51 Use the CAP as the City's primary strategy to reduce GHG emissions, including strategies related to land use and transportation, energy efficiency, solid waste, urban greening, and energy generation and storage.

OSEC-P-52 Update the City's Climate Action Plan as needed to synchronize GHG reduction targets with new state mandates and to incorporate new technology and strategies.

OSEC-P-53 Require all new or substantially renovated gas stations to provide electric charging stations and be future-ready to switch to electric charging stations only in future.

OSEC-P-54 Outline a plan of mobile source enforcement methods, such as periodic mobile source (e.g., trucks) checkpoints, along major truck routes throughout the City to enforce emission opacity regulations. Technical assistance can be sought from California Air Resources Board (CARB) and the California Highway Patrol (CHP) on enforcement issues.

OSEC-P-55 Enforce CARB's idling reduction strategies that requires school buses and other heavy-duty vehicle operators to turn off their engines if they are idling more than five minutes. Focus enforcement near schools, residential areas, and other sensitive uses as well as heavy truck trafficked areas. Further, design traffic plans, including the development of suggested routes, to minimize diesel truck idling

OSEC-P-56 To reduce transportation-related GHG emissions, promote active modes of transportation including transit, bicycling, and walking by providing infrastructure that supports each of these networks, such as adding or expanding bicycle lanes, exploring use of sidewalk bulb outs, increasing bus service frequency, and exploring multimodal connectivity between these types of transportation.

OSEC-P-57 Facilitate energy efficiency in building regulations, providing flexibility to achieve specified energy performance levels and requiring energy efficiency measures as appropriate.

OSEC-P-58 Support sustainability measures to reduce and conserve municipal and private energy uses, especially from commercial and industrial uses which consume 78 percent of the City's total electric usage.

OSEC-P-59 Coordinate with the business and industrial community to encourage energy efficiency in the City's largest energy users while supporting economic growth objectives.

OSEC-P-60 Support efforts to enhance Carson's urban forestry to help reduce ambient temperatures and an opportunity for residents to enjoy outdoor spaces by providing ecological benefits such as shade and some air filtration, in addition to economic benefits.

OSEC-P-61 Seek opportunities for funding and provide incentives to promote siting or use of clean air technologies (e.g., fuel cell technologies, renewable energy sources, UV coatings, hydrogen fuel).

**Mitigation Measures**

None required.

### 3.8.2 DO **PROPOSED** CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

***(b) Would the Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?***

***GHG Emissions from Modified Project***

The Modified Project would generate direct and indirect GHG emissions because of different types of emissions sources, including the following:

- Construction: emissions associated with demolition of the existing site features and parking areas, shoring, excavation, grading, and construction-related equipment and vehicular activity.
- Area source: emissions associated with landscape equipment.
- Energy source (building operations): emissions associated with electricity and natural gas use for space heating and cooling, water heating, energy consumption, and lighting;
- Stationary Source: emissions associated with stationary equipment (e.g., emergency generators).
- Mobile Source: emissions associated with vehicles accessing the Project Site;
- Solid Waste: emissions associated with the decomposition of the waste, which generates methane based on the total amount of degradable organic carbon.

- Water/Wastewater: emissions associated with energy used to pump, convey, deliver, and treat water.
- Refrigerants: substances used in equipment for air conditioning and refrigeration. Most refrigerants are HFCs or blends of them, which can have high global warming potential (GWP) values.
- Vegetation: emissions from land use change and changes in sequestration from tree removal and planting.

The Modified Project would generate an incremental contribution to and a cumulative increase in GHG emissions. A specific discussion regarding potential GHG emissions associated with the construction and operational phases of the Modified Project is provided below.

**Construction.** Sources of GHG emissions during construction would include heavy-duty off-road diesel equipment and vehicular travel to and from the Project Site (i.e., construction worker trips, vendor material delivery trips, and haul truck trips for importing and/or exporting bulk materials). GHG emissions that would be generated by construction of the Modified Project were estimated using CalEEMod, as recommended by SCAQMD. The construction emissions modeling relied on reasonably conservative equipment and vehicle activity forecasts that were also used to prepare the air quality analysis, which focuses on maximum daily emissions. To estimate total cumulative construction truck trip emissions, it was assumed that the average truck trip emissions would be approximately 75 percent of the maximum daily delivery and haul trips.

**Table 3-12** provides a summary of the total GHG emissions that would be generated by source type during construction. As shown below, construction of the Modified Project would generate a total of 6,310.2 metric tons of carbon dioxide equivalents ($MTCO_2e$). In accordance with SCAQMD methodology, the total quantify of construction-related GHG emissions are averaged, or amortized, over a 30-year operational lifetime for the Modified Project and added to the annual operational emissions to characterize the long-term, cumulative effects of its implementation. The annual amortized GHG emissions associated with construction of the Modified Project would be approximately 210.4 metric tons of carbon dioxide equivalents ($MTCO_2e$) per year. A complete listing of the construction equipment by on-site and off-site activities, duration, and emissions estimation model input assumptions used in this analysis is included within the emissions calculation worksheets that are provided in Appendix A.

**TABLE 3-12: ESTIMATED CONSTRUCTION GREENHOUSE GAS EMISSIONS**

| Construction Emission Source | Carbon Dioxide Equivalent Emissions ($MTCO_2e$) |
|---|---|
| Off-Road Equipment & Concrete/Asphalt Pouring Trucks | 2,155.0 |
| On-Site Water Trucks for Fugitive Dust Control | 2.6 |
| Construction Crew Commuting Vehicle Trips | 1,211.8 |
| Construction Materials Delivery Truck Trips | 1,251.8 |
| Bulk Materials Haul Truck Trips | 1,689.0 |
| **TOTAL CONSTRUCTION GHG EMISSIONS** | **6,310.2** |
| ***Amortized Annual Emissions (30-Year Operational Lifetime)*** | ***210.4*** |

**SOURCE**: TAHA, 2025

**Operations.** In terms of long-term operational GHG emissions, CalEEMod produces estimates associated with the following source types:

- Area Source Emissions: CalEEMod relies on regional average climate conditions to estimate emissions that would be generated by landscaping equipment. While CARB's 2022 regulations governing small-engine equipment require that equipment manufactured in 2024 or beyond be outfitted with zero-emission power sources, the current version of CalEEMod has not factored in this development; as such, landscaping emissions are overstated in the long-term.

- Energy Source Emissions: GHG emissions are emitted because of activities in buildings when electricity and natural gas are used as energy sources. Combustion of any type of fuel emits $CO_2$ and other GHG emissions directly into the atmosphere. When electricity is used in a building, the electricity generation typically takes place remotely at a power plant; electricity use in a building generally causes emissions in an indirect manner. GHG emissions from electricity use are directly dependent on the electricity utility provider, which is SCE. Following the adoption of Senate Bill 100 (SB 100, De Leon, 2018), electricity providers are required to provide renewable energy for at least 60 percent of their delivered power by 2030 and 100 percent use of renewable energy and zero-carbon resources by 2045. Therefore, it was assumed that Modified Project operations in 2050 would not generate any GHG emissions associated with electricity consumption.

  CalEEMod natural gas usage rates are based on the California Energy Commission-sponsored California Commercial End-Use Survey and the California Residential Appliance Saturation Survey studies. The data are specific for climate zones; therefore, Zone 11 was selected for the Project Site based on the zip code tool.

- Solid Waste Generation Emissions: CalEEMod calculates emissions associated with solid waste using an estimate of the waste generated by applicable emissions factors provided in Section 2.4 of the U.S. EPA's AP-42, Compilation of Air Pollutant Emission Factors, with built-in assumptions related to how the waste is processed. Default CalEEMod solid waste generation rates for each applicable land use were selected for this GHG analysis.

- Water Usage and Wastewater Generation Emissions: GHG emissions are related to the energy used to convey, treat, and distribute water, as well as treat wastewater. Thus, these emissions are generally indirect emissions from the production of electricity to power these systems. Three processes are necessary to supply potable water: (1) supply and conveyance of the water from the source; (2) treatment of the water to potable standards; and (3) distribution of the water to individual users. After use, energy is used as the wastewater is treated and reused as reclaimed water. CalEEMod calculates electricity consumption from water and wastewater processes using an estimate of the water usage by the applicable energy intensity factor to determine the embodied energy necessary to supply potable water. GHG emissions are then calculated based on the amount of electricity consumed multiplied by the GHG emissions intensity factors for the utility provider. Since the supply of electricity for the Modified Project is mandated to be carbon-free by 2045, emissions associated with water and wastewater were assumed to be zero.

  SCE programs include initiatives designed to reduce indoor water consumption and wastewater generation by 20 percent. These include the 2022 requirements for installation of the latest ultra-high efficiency plumbing fixtures, the standards that promote increasing water-resistant turf and incorporating rainfall capture techniques in project designs, aggressive outdoor water consumption programs through its landscape ordinance, and water recycling programs designed to increase recycled water to 59,000 acre-feet by 2035.

- Refrigerants: CalEEMod also calculates GHG emissions associated with cooling structures and refrigeration needs based on the land use types comprising a project. Default parameters related to refrigerants were relied upon for the Modified Project analysis.

- Off-Road Equipment: Based on the land uses associated with the Modified Project, it is likely that operations associated with the hotel, events center, and retail/restaurant spaces would involve deliveries that require small forklifts to receive and store supplies. Therefore, it was assumed that several small forklifts would be in operation throughout the Project Site.

- Mobile Source Emissions: Although CalEEMod also produces estimates of GHG emissions associated with on-road vehicle activities, emissions for the Modified Project were analyzed at the citywide scale. This approach was taken because the Modified Project would affect local traffic patterns beyond vehicle trips directly generated by the individual land uses. The transportation analysis prepared to support this Addendum involved regional modeling that estimated the daily VMT that would occur under existing conditions and with implementation of the Modified Project in the horizon year of 2050. Similar to the methodology described within the Air Quality section of this Addendum, the CARB EMFAC2021 mobile source emissions inventory database was used to estimate annual GHG emissions that would be generated by on-road vehicle travel. Detailed calculation sheets for on-road vehicle travel emissions are provided in Appendix A.

**Table 3-13** summarizes the annual GHG emissions that would be generated during future operation of the Modified Project in the horizon year of 2050, with the mobile source emissions accounting for citywide VMT. The regional transportation modeling analysis determined that daily citywide VMT under existing conditions was 1,543,781 vehicle-miles per day, and that daily citywide VMT in the horizon year of 2050 with implementation of the Modified Project would be 1,400,594 vehicle-miles per day. An annualization factor of 347 was used to estimate the annual VMT, which is consistent with the CARB GHG inventory program. The effect of the Modified Project on mobile source emissions is characterized by the net change in annual GHG emissions relative to existing conditions, consistent with the State CEQA Guidelines and the Certified EIR. As shown below, site-specific emissions would be approximately 2,640.4 $MTCO_2e$ per year in the horizon year of 2050. The net difference in citywide mobile source GHG emissions would be approximately -108,383 $MTCO_2e$/year relative to existing conditions, and the cumulative effect of the Modified Project would be a decrease of 105,742.6 $MTCO_2e$ annually.

The substantial decrease in mobile source emissions is attributable to several factors. Between existing conditions and the horizon year of 2050, significant turnover of the regional on-road vehicle fleet is expected. As older vehicles are phased out of use and newer vehicles replace them, the aggregate average fuel efficiency would improve and the aggregate average emissions on a per-mile basis would decrease. Approved in 2022, CARB's Advanced Clean Cars II rule established a year-by-year roadmap towards ensuring that all newly manufactured passenger vehicles and light-duty trucks throughout the state would be zero-emission (i.e., electric or plug-in hybrid) by 2035. As the proportion of the regional fleet that is zero-emission increases, the GHG emissions associated with the transportation sector will decrease.

| **TABLE 3-13: ESTIMATED OPERATIONAL GREENHOUSE GAS EMISSIONS** | |
|---|---|
| **Construction Emission Source** | **Annual Carbon Dioxide Equivalent Emissions ($MTCO_2e$/year)** |
| ***Project Site-Specific Emissions*** | |
| Amortized Construction Emissions | 210.4 |
| Area Source Emissions | 32.0 |
| Energy Source Emissions | 1,403.0 |
| Water and Wastewater Emissions | 0.0 |
| Solid Waste Processing Emissions | 822.0 |
| Refrigerants Consumption Emissions | 65.0 |
| Off-Road Equipment Emissions | 108.0 |
| ***Subtotal Site-Specific Emissions*** | ***2,640.4*** |
| ***Citywide Mobile Source Emissions*** | |
| 2050 Modified Project Scenario | 225,268 |
| Existing Conditions Scenario | 333,651 |
| ***Net Change in Citywide Mobile Source Emissions*** | ***-108,383*** |
| **Total Net Annual Emissions** | **-105,742.6** |
| **SOURCE**: TAHA, 2025 | |

The design and land use composition of the Modified Project would also contribute to reducing GHG emissions associated with local on-road vehicle travel. The characteristics listed below are specific measures outlined in CAPCOA's guidance Handbook for quantifying reductions in GHG emissions for planned land use developments that are applicable to the Modified Project.[22]

- CAPCOA Measure T-1 – Increase Residential Density: Increased density, measured in terms of persons or dwelling units per unit area, reduces emissions associated with transportation as it reduces the distance people travel for work or services and provides a foundation for the implementation of other strategies, such as enhanced transit services. The Modified Project would introduce a new high-density residential development to the Project Site where none currently exists within the Downtown Core of the City.

- CAPCOA Measure T-4 – Integrate Affordable and Below Market Rate Housing: The Modified Project will provide affordable housing units in accordance with the CALGreen Code. Affordable housing provides greater opportunity for lower income families to live closer to job centers and achieve a jobs/housing match near transit.

- CAPCOA Measure T-10 – Provide End-of-Trip Bicycle Facilities: The Modified Project design incorporates robust bicycle parking facilities that would be accessible to employees of the planned retail, restaurant, and hotel uses on the Project Site. The provision and maintenance of secure bike parking and related facilities encourage commuting by bicycle, thereby reducing VMT and GHG emissions.

- CAPCOA Measure T-14 – Provide Electric Vehicle Charging Infrastructure: The design of the Modified Project would include infrastructure to accommodate electric vehicle charging at all proposed parking facilities. The expansion of electric vehicle charging infrastructure

[22] CAPCOA, *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity*, October 2024.

accommodates the statewide and local initiatives to incentivize consumer transition to zero-emission vehicles, which is consistent with GHG emissions reduction policies.

- CAPCOA Measure T-18 – Provide Pedestrian Network Improvement: Providing sidewalks and an enhanced pedestrian network encourages people to walk instead of drive. This mode shift results in a reduction in VMT and GHG emissions The Modified Project involves improvements and modifications to the transportation facilities within and adjacent to the Project Site, including removing or reconstructing the existing pedestrian bridge over Civic Center Drive, providing new paving along the Carson Street right-of-way, widening the sidewalk on the north side of Carson Street, providing new crosswalks at the Avalon Boulevard/Carson Street intersection, and providing a new mid-block crossing on Carson Street near the front entry of the new City Hall building. The New Street would continue to connect Desford Street to Carson Street, and the existing pedestrian bridge would be replaced with an east-west pedestrian pathway that would connect the proposed Jewel Plaza to the eastern end of the Project Site. The proposed improvements and modifications would make the Project Site and its adjacent area more pedestrian friendly and would improve pedestrian safety and mobility.

- CAPCOA Measure T-46 – Provide Transit Shelters: The Modified Project would upgrade transit shelters at bus stops along Carson Street and Avalon Boulevard. Providing amenities that makes bus stops more comfortable when waiting for the bus would encourages increased transit ridership.

- CAPCOA Measure T-55 – Infill Development: The Modified Project would introduce new residential development within the Downtown Core, which would allow residents to live closer to job centers and community destinations.

- CAPCOA Measure E-7 – Require Higher Efficacy Public Street and Area Lighting: The design standards for the Modified Project include the installation of high efficiency lighting in exterior areas and along the internal street and walkways.

- CAPCOA Measure N-1 – Create New Vegetated Open Space: The Modified Project design would increase the area of landscaping, trees, and grass from approximately 5.7 acres to 7.1 acres. The removal of the surface parking lots would reduce the urban heat island effect, and the increase in pervious ground cover would facilitate better stormwater infiltration and management.

- CAPCOA Measure N-2 – Expand Urban Tree Planting: The Modified Project design includes the installation of additional street trees on the perimeter of the property boundary along Avalon Boulevard, Carson Street, Desford Street, and Civic Plaza Drive. Additional trees may also be provided within the Project Site. Expanding the street tree network will increase carbon sequestration and provide environmental benefits related to GHG emissions.

***Consistency with Applicable Plans and Policies***

The discussion below describes the extent the Modified Project would comply with or exceeds the performance-based standards included in the regulations outlined in the CARB Climate Change Scoping Plan and the SCAG 2024-2050 RTP/SCS, each of which identify GHG-reducing measures that directly and indirectly apply to the Modified Project. This analysis also evaluates the Modified Project's consistency with City plans and programs that generally address climate change. As shown herein, the Modified Project would be consistent with the applicable GHG reduction plans and policies.

**Statewide: Climate Change Scoping Plan.** The Scoping Plan is a GHG emission reduction roadmap developed and updated by CARB at least once every five years, as required by Assembly

Bill (AB) 32. It lays out the transformations needed across various sectors to reduce GHG emissions and reach the State's climate targets. CARB published the Final 2022 Scoping Plan for Achieving Carbon Neutrality (2022 Scoping Plan Update) in November 2022, as the third update to the initial plan that was adopted in 2008.

- The initial 2008 Scoping Plan laid out a path to achieve the AB 32 target of returning to 1990 levels of GHG emissions by 2020, a reduction of approximately 15 percent below business as usual activities.
- The 2013 Scoping Plan Update (adopted in 2014) assessed progress toward achieving the 2020 target and made the case for addressing short-lived climate pollutants.
- The 2017 Scoping Plan Update shifted focus to the newer SB 32 goal of a 40 percent reduction below 1990 levels by 2030 by laying out a detailed cost-effective and technologically feasible path to this target, and also assessed progress towards achieving the AB 32 goal of returning to 1990 GHG levels by 2020. The 2020 goal was ultimately reached in 2016, four years ahead of the schedule called for under AB 32.
- The 2022 Scoping Plan Update is the most comprehensive and far-reaching Scoping Plan developed to date. It identifies a technologically feasible, cost-effective, and equity-focused path to achieve new targets for carbon neutrality by 2045 and to reduce anthropogenic GHG emissions to at least 85 percent below 1990 levels. The 2022 Scoping Plan Scenario also identified the need to accelerate AB 32's 2030 target, from 40 percent to 48 percent below 1990 levels, and calls for a reduction in metric tons per capita 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045.

The 2022 Scoping Plan Update reflects existing and recent direction in the Governor's Executive Orders and State Statutes, which identify policies, strategies, and regulations in support of and implementation of the Scoping Plan. Among these include Executive Order B-55-18 and AB 1279 (The California Climate Crisis Act), which identify the 2045 carbon neutrality and GHG reduction targets required for the Scoping Plan. Aligning local jurisdiction action with state-level priorities to tackle climate change and the outcomes called for in the 2022 Scoping Plan Update is identified as critical to achieving the statutory targets for 2030 and 2045. To assist local jurisdictions, the 2022 Scoping Plan Update presents a non-exhaustive list of impactful GHG reduction strategies that can be implemented by local governments within three priority areas: transportation electrification, VMT reduction, and building decarbonization.

**Table 3-14** evaluates how the Modified Project would be consistent with the provisions of the 2022 Climate Change Scoping Plan. As discussed, the Modified Project would be consistent with the State's Climate Change Scoping Plan.

**TABLE 3-14: 2022 CLIMATE CHANGE SCOPING PLAN CONSISTENCY ANALYSIS**

| Sector | Actions and Strategies | Project Consistency Analysis |
|---|---|---|
| Smart Growth / Vehicle Miles Traveled (VMT) | VMT per capita reduced 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045 | **No Conflict.** The Modified Project and its Entertainment Retail Option represents an infill development within an urbanized area that would concentrate new residences within a Livable Corridor and reduce per capita VMT and GHG emissions. The Modified Project would be consistent with SB 375 and its VMT reduction goals, as well as the GHG and transportation goals of the 2024–2050 RTP/SCS. |
| Light-duty Vehicle (LDV) Zero Emission Vehicles (ZEVs) | 100 percent of Light Duty Vehicle sales are ZEV by 2035. | **No Conflict.** Emissions from vehicle engines from the Modified Project and its Entertainment Retail Option would be regulated by state regulations governing technology and cleaner emissions. |
| Truck ZEVs | 100 percent of medium-duty (MDV)/HDV sales are ZEV by 2040 (AB 74 University of California Institute of Transportation Studies [ITS] report) | **No Conflict.** While the Modified Project and its Entertainment Retail Option would not generate substantial medium- and heavy-duty truck traffic, it would not impede the advancement of cleaner trucks over time. |
| Aviation | 20 percent of aviation fuel demand is met by electricity (batteries) or hydrogen (fuel cells) in 2045. Sustainable aviation fuel meets most or the rest of the aviation fuel demand that has not already transitioned to hydrogen or batteries. | **No Conflict.** While the Modified Project and its Entertainment Retail Option would not directly or indirectly impact aviation industry, it would not impede the advancement of a cleaner aviation industry over time. |
| Ocean-going Vessels (OGVs) | 2020 OGV At-Berth regulation fully implemented, with most OGVs utilizing shore power by 2027.<br>25 percent of OGVs utilize hydrogen fuel cell electric technology by 2045. | **No Conflict.** While the Modified Project and its Entertainment Retail Option would not directly or indirectly impact trade or OGVs, it would not impede the advancement of cleaner on- or off-shore sources over time. |
| Port Operations | 100 percent of cargo handling equipment is zero-emission by 2037.<br>100 percent of drayage trucks are zero emission by 2035. | **No Conflict.** While the Modified Project and its Entertainment Retail Option would not directly impact trade or port operations, it would not impede the advancement of cleaner on-shore sources over time. |
| Freight and Passenger Rail | 100 percent of passenger and other locomotive sales are ZEV by 2030. 100 percent of line haul locomotive sales are ZEV by 2035. Line haul and passenger rail rely primarily on hydrogen fuel cell technology, and others primarily utilize electricity. | **No Conflict.** While the Modified Project and its Entertainment Retail Option would not directly impact freight or passenger rail, it would not impede the advancement of cleaner locomotives over time.<br>The Modified Project and its Entertainment Retail Option's land uses would not include freight transportation or warehousing that would be subject to the California Sustainable Freight Action Plan. Therefore, the Modified Project would not interfere or impede the implementation of the Sustainable Freight Action Plan. |
| Oil and Gas Extraction | Reduce oil and gas extraction operations in line with petroleum demand by 2045. | **No Conflict.** While the Modified Project and its Entertainment Retail Option would not directly or indirectly impact oil extraction; it would help reduce demand for petroleum products from energy, area, and mobile sources. |
| Electricity Generation | Sector GHG target of 38 MMTCO2e in 2030 and 30 MMTCO2e in 2035. Retail sales load coverage 20 gigawatts (GW) of offshore wind by 2045. Meet increased demand for electrification without new fossil gas-fired resources. | **No Conflict.** The Modified Project and its Entertainment Retail Option would not directly or indirectly impact the sources of electricity generation. |

**TABLE 3-14: 2022 CLIMATE CHANGE SCOPING PLAN CONSISTENCY ANALYSIS**

| Sector | Actions and Strategies | Project Consistency Analysis |
|---|---|---|
| New Residential and Commercial Buildings | All electric appliances beginning 2026 (residential) and 2029 (commercial), contributing to 6 million heat pumps installed statewide by 2030. | **No Conflict.** The Modified Project and its Entertainment Retail Option would incorporate appliances that are consistent with Title 24 and CALGreen requirements and consistent with the reduction of residential energy use. |
| Food Products | 7.5 percent of energy demand electrified directly and/or indirectly by 2030;<br>75 percent by 2045. | **No Conflict.** The Modified Project and its Entertainment Retail Option would not directly or indirectly impact the sources of energy for food production. |
| Construction Equipment | 25 percent of energy demand electrified by 2030 and 75 percent electrified by 2045 | **No Conflict.** The Modified Project and its Entertainment Retail Option would not directly or indirectly impact the sources of energy for construction equipment. |
| Low Carbon Fuels for Transportation | Biomass supply is used to produce conventional and advanced biofuels, as well as hydrogen. | **No Conflict.** This regulatory program applies to fuel suppliers, not directly to land use development. GHG emissions related to vehicular travel associated with the Modified Project and its Entertainment Retail Option would benefit from this regulation because fuel used by project-related vehicles would be required to comply with the LCFS. Mobile source GHG emissions estimates were calculated using CalEEMod that includes implementation of the LCFS into mobile source emission factors. The current LCFS targets a 20 percent reduction in carbon intensity from a 2010 baseline by 2030. |
| Low Carbon Fuels for Buildings and Industry | In 2030s biomethane blended in pipeline, renewable hydrogen blended in fossil gas pipeline at 7 percent energy (~20 percent by volume), ramping up between 2030 and 2040 | **No Conflict.** The Modified Project and its Entertainment Retail Option would comply with this this action/strategy being located within the SCE and SoCalGas service area and would comply with CalGreen and Title 24 energy efficiency standards. SCE must generate electricity that would increase renewable energy resources to 33 percent by 2020 and 50 percent by 2030. As SCE would provide electricity service to the Project Site, by 2030 the Modified Project would use electricity consistent with the requirements of SB 350.<br>As required under SB 350, doubling of the energy efficiency savings from retail customers by 2030 would primarily rely on the existing suite of building energy efficiency standards under CCR Title 24, Part 6 (consistency with this regulation is discussed below) and utility-sponsored programs such as rebates for high-efficiency appliances, HVAC systems, and insulation. |
| High GWP Potential Emissions | Low GWP refrigerants introduced as building electrification increases, mitigating HFC emissions. | **No Conflict.** This program applies to state regulators seeking to reduce high GWP refrigerants and is not directly related to development of the Modified Project and its Entertainment Retail Option. However, the Modified Project and its Entertainment Retail Option would not interfere or impede efforts to reduce such pollutants. |

**TABLE 3-14: 2022 CLIMATE CHANGE SCOPING PLAN CONSISTENCY ANALYSIS**

| Sector | Actions and Strategies | Project Consistency Analysis |
|---|---|---|
| Natural and Working Lands | Conserve 30 percent of the state's NWL and coastal waters by 2030. Implement near- and long-term actions to accelerate natural removal of carbon and build climate resilience in our forests, wetlands, urban greenspaces, agricultural soils, and land conservation activities in ways that serve all communities—and in particular low-income, disadvantaged, and vulnerable communities. | **No Conflict.** This program applies to state regulators governing Natural and Working Lands and is not directly related to development of the Modified Project and its Entertainment Retail Option. However, the Modified Project and its Entertainment Retail Option would not interfere with or impede implementation of the Integrated Natural and Working Lands Implementation Plan, Executive Order N-82-20, SB 27, or SB 1386. |
| Developed Lands | Increase urban forestry investment by 200 percent above current levels and utilize tree watering that is 30 percent less sensitive to drought. Establish defensible space that accounts for property boundaries. | **No Conflict.** This program applies to state regulators addressing urban forestry and is not directly related to development of the Modified Project and its Entertainment Retail Option. However, the Modified Project would not interfere or impede implementation of AB 2251 and efforts to increase the urban canopy. |
| Wetlands | Restore 60,000 acres of Delta wetlands | **No Conflict.** This program applies to state regulators restoring Delta wetlands and is not directly related to development of the Modified Project and its Entertainment Retail Option. However, the Modified Project would not interfere or impede efforts to restore wetland ecologies. |
| Sparsely Vegetated Lands | Land conversion at 50 percent of the Reference Scenario land conversion rate. | **No Conflict.** This program applies to state regulators slowing the conversion of sparsely vegetated lanes and is not directly related to development of the Project. However, the Modified Project and its Entertainment Retail Option would not interfere or impede efforts to slow urban conversion of such lands |
| Cap-and-Trade Program | Implement the post-2020 Cap-and-Trade Program with declining annual caps. | **Not Applicable.** This applies to the market-based program to reduce GHG emissions over time and is not applicable to a development project. |

**SOURCE:** TAHA, 2025, based on CARB, *2022 Scoping Plan for Achieving Carbon Neutrality*, Scoping Plan Scenario.

In addition to the demonstrated consistency with applicable GHG emissions reduction regulations and strategies, the Modified Project would not conflict with future anticipated statewide GHG emissions reductions goals. Specifically, CARB has outlined strategies for achieving the 2030 reduction target of 40 percent below 1990 levels, as mandated by SB 32 as well as carbon neutrality by 2045. These strategies include renewable resources for the state's electricity, increasing the fuel economy of vehicles and the penetration of zero-emission or hybrid vehicles into the vehicle fleet, reducing the rate of growth in VMT, supporting high-speed rail and other alternative transportation options, and use of high-efficiency appliances, water heaters, and HVAC systems. The Modified Project would also benefit from statewide and utility-provider efforts towards increasing the portion of electricity provided from renewable resources. SCE has committed to increasing renewable sources that exceed the Renewables Portfolio Standard requirements. The Modified Project would benefit from statewide efforts to improve fuel economy of vehicles and would contribute to reducing VMT growth given its design and complementary mix of uses at an infill site.

**Regional: SCAG RTP/SCS. Table 3-15** evaluates how the Modified Project would be consistent with the performance measures determined by SCAG staff to be achieved through implementation of the 2024–2050 RTP/SCS. As discussions, the Modified Project would not impede achievement of the performance measure results and would be consistent with land use and transportation planning strategies of the RTP/SCS to reduce regional VMT.

**TABLE 3-15: 2024–2050 RTP/SCS GREENHOUSE GAS CONSISTENCY ANALYSIS**

| Performance Measure | Consistency Analysis |
|---|---|
| By 2050, decrease average distance traveled:<br>• for work trips from 16.2 to 15.9 miles.<br>• for non-work trips to 6.1 miles | **Consistent.** The Modified Project and its Entertainment Retail Option are infill development that would locate more diverse housing solutions within the Downtown Core along a Livable Corridor, consistent with the 2024-2050 RTP/SCS policies. While 60 percent of work trips were less than 30 minutes, the Modified Project would increase the density of development on the Project Site, the Harbor Gateway, and the South Bay that would potentially decrease distance for commutes within these job centers.[23] It would also potentially reduce the need for longer travel to non-work destinations, which averaged 27 minutes per trip in 2018. |
| By 2050, increase share of all trips:<br>• 10 miles or less from 46.9 to 47.6 percent.<br>• 25 miles or less from 80.1 to 80.7 percent. | **Consistent.** The Modified Project and its Entertainment Retail Option are infill development that would focus on growth within a Livable Corridor in the Downtown Core District. It would increase the density of development on the Project Site that would potentially reduce the need for longer travel to destinations outside of the Harbor Gateway and South Bay in general. |
| By 2050, decrease share of:<br>• work trips by single-occupancy vehicles (SOV) from 65.9 to 61.9 percent.<br>• all trips by SOV from 37.0 to 34.7 percent. | **Consistent.** The Modified Project and its Entertainment Retail Option are infill development in the dense Downtown Core that would reduce the rate of growth in SOV use and congestion by virtue of its transit accessibility with bus stops on Avalon Boulevard and Carson Street, as well as the provision of bicycle parking. |
| By 2050, increase share of:<br>• work trips by transit from 4.6 to 7.9 percent.<br>• all trips by transit from 3.9 to 5.3 percent | **Consistent.** The Modified Project and its Entertainment Retail Option would increase the density of development and introduce new housing on the Project Site, as well as improve transit accessibility and frequency through the on-site bus depot. |
| By 2050, increase share of:<br>• work trips by bicycle from 1.9 to 4.1 percent.<br>• all trips by bicycle from 1.6 to 3.5 percent | **Consistent.** The Modified Project and its Entertainment Retail Option would increase the density of development and jobs on the Project Site, which is served by flat streets and adjacent to Carson Street which is a Class II bike route. As such, the Modified Project could increase the share of bicycling trips over existing conditions. |
| By 2050, increase share of:<br>• pedestrian work trips from 3.6 to 4.3 percent.<br>• all pedestrian trips from 8.8 to 10.2 percent. | **Consistent.** The Modified Project and its Entertainment Retail Option would increase the density of development and housing on the Project Site and would improve the pedestrian network. As such, the Modified Project could increase the share of walking trips over existing conditions. |
| Increase share of regional housing units within designated Priority Development Areas (PDAs) from 57.0 to 61.1 percent by 2050. | **Consistent.** The Modified Project and its Entertainment Retail Option would introduce new residential units within a Livable Corridor, which is one of the four categories of PDAs in the RTP/SCS. |

**SOURCE:** TAHA, 2025; SCAG, *Connect SoCal 2024*, *2024-2050 Regional Transportation Plan/Sustainable Communities Strategy*, adopted April 4, 2024.

[23] SCAG, *Profile of the City of Carson*, May 2019.

***Local: City of Carson.*** Locally, the City has several conservation-based plans, programs, and requirements that also indirectly produce GHG reductions. While these are not considered officially binding climate action plans, the Modified Project's consistency with these local initiatives is summarized.

City of Carson General Plan Update Open Space and Environmental Conservation Element. As summarized in **Table 3-16**, the Modified Project would be consistent with applicable GHG policies in the City's General Plan Update Open Space and Environmental Conservation Element.[24]

**TABLE 3-16: GENERAL PLAN UPDATE GREENHOUSE GAS CONSISTENCY ANALYSIS**

| Performance Measure | Consistency Analysis |
|---|---|
| **Policy OSEC-G-23**: Undertake initiatives outlined in the Climate Action Plan to enhance sustainability by reducing the community's GHG emissions and fostering green development patterns—including buildings, sites, and landscapes. | **No Conflict.** While this policy calls on the City to advance citywide policies and isn't directly applicable to land use development projects, the Modified Project and its Entertainment Retail Option would comply with Building Code and Title 24 requirements that reduce energy and water consumption and GHG emissions. |
| **Policy OSEC-G-24**: Incorporate green infrastructure design in new projects to promote sustainability in the built environment. | **Consistent.** The Modified Project and its Entertainment Retail Option would comply with Building Code and Title 24 requirements that would reduce energy and water consumption as well as GHG emissions. |
| **Policy OSEC-G-25**: Demonstrate leadership by reducing the use of energy and fossil fuel consumption in municipal operations, including transportation, waste and water reduction, recycling, and by promoting efficient building design and use. | **No Conflict.** While this policy calls on the City to advance citywide policies and isn't directly applicable to development projects, the Modified Project and its Entertainment Retail Option would comply with Building Code and Title 24 requirements that would reduce energy and water consumption and associated GHG emissions. |
| **Policy OSEC-G-26**: Plan for extreme weather events by incorporating the potential effects and threats of climate change into emergency management planning. | **No Conflict.** This policy calls on the City to advance citywide policies that address emergency planning and isn't directly applicable to land use development projects. |
| **Policy OSEC-G-27**: Reduce the impacts of extreme heat events resulting from global warming and climate change by diminishing urban heat island effects. Explore heat mitigation strategies including planting trees, limiting the use of heat-absorbing pavement, encouraging use of cool roofs and reflective pavements, and providing cooling elements in public spaces such as shade structures and water features. | **Consistent.** The Modified Project and its Entertainment Retail Option would remove existing surface parking lots that contribute to the urban heat island effect and would increase the landscaped area on the Project Site. The Modified Project design also includes planting of additional street trees adjacent to the Project Site, as well as additional trees within the Project Site. The street trees would provide shade on sidewalks. The street trees and trees on the Project Site would provide environmental benefits related to carbon sequestration. |
| **Policy OSEC-G-28**: Promote sustainable practices as well as environmental remediation for heavy industrial areas and seek to reduce trucking emissions. | **No Conflict.** This policy focuses on growth in industrial areas and is not applicable to the Modified Project. |

**SOURCE:** TAHA, 2025; City of Carson, *2040 General Plan*, adopted April 4, 2023..

City of Carson Energy Efficiency Climate Action Plan. With regards to local climate planning initiatives, the City—in cooperation with the South Bay Cities Council of Governments—developed a EECAP in 2017 to reduce GHG emissions, primarily associated with municipal operations. The CAP's focus on land use and transportation, energy efficiency, solid waste, urban greening, and energy generation and storage are aimed at City leadership and the development of citywide

[24] City of Carson, *2040 General Plan*, adopted April 4, 2023.

regulations and programs that advance carbon reduction. While the EECAP's policies are generally not applicable to land use development projects, the Modified Project would comply with the Building Code and Title 24's conservation requirements and would incorporate design standards developed with sustainability as a priority. As such, the Modified Project would be consistent with the City's implementation of the EECAP over time.

### *Summary*

The Modified Project would generate an incremental contribution to and a cumulative increase in GHG emissions. The Modified Project would not conflict with the Climate Change Scoping Plan and Update, the 2024-2050 RTP/SCS, the City's General Plan Update Open Space and Environmental Conservation Element, and the City's EECAP. Consistency with these plans, policies, regulations, and GHG emissions reduction actions/strategies would reduce the Modified Project's incremental contribution of GHG emissions. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

## Entertainment Retail Option

The impact assessment for the Entertainment Retail Option follows the same approach as presented above for the Modified Project. Construction of the Entertainment Retail Option would occur over the same timeframe, and it was reasonably assumed that its development would require a similar amount of off-road equipment and on-road vehicle activity. Thus, the construction GHG emissions analysis presented in **Table 3-12** is also applicable to the Entertainment Retail Option, and the 30-year amortized emissions would be approximately 210.4 $MTCO_2e$ annually. **Table 3-17** summarizes the estimated GHG emissions in the horizon year of 2050 with implementation of the Entertainment Retail Option, accounting for the citywide VMT. The net change in annual mobile source GHG emissions would be a reduction of 108,032 $MTCO_2e$, and the net cumulative effect would be a decrease of 105,453.6 $MTCO_2e$.

**TABLE 3-17: ESTIMATED OPERATIONAL GREENHOUSE GAS EMISSIONS**

| Construction Emission Source | Annual Carbon Dioxide Equivalent Emissions ($MTCO_2e$/year) |
|---|---|
| ***Project Site-Specific Emissions*** | |
| Amortized Construction Emissions | 210.4 |
| Area Source Emissions | 32.0 |
| Energy Source Emissions | 1,403.0 |
| Water and Wastewater Emissions | 0.0 |
| Solid Waste Processing Emissions | 822.0 |
| Refrigerants Consumption Emissions | 65.0 |
| Off-Road Equipment Emissions | 108.0 |
| ***Subtotal Site-Specific Emissions*** | ***2,640.4*** |
| ***Citywide Mobile Source Emissions*** | |
| 2050 Entertainment Retail Option Scenario | 225,619 |
| Existing Conditions Scenario | 333,651 |
| ***Net Change in Citywide Mobile Source Emissions*** | ***-108,032*** |
| **Total Net Annual Emissions** | **-105,453.6** |

**SOURCE**: TAHA, 2025

The assessment of consistency with GHG emissions reduction plans for the Entertainment Retail Option is identical to the analysis provided for the Modified Project. The replacement of the hotel land use with the entertainment and retail complex would not change any of the rationale or conclusions from those presented for the Modified Project. Therefore, implementation of the Entertainment Retail Option would not conflict with the Climate Change Scoping Plan and Update, the 2024-2050 RTP/SCS, the City's General Plan Update Open Space and Environmental Conservation Element, and the City's EECAP. Consistency with these plans, policies, regulations, and GHG emissions reduction actions/strategies would reduce the Entertainment Retail Option's incremental contribution of GHG emissions. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.8.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.8.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.8.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.8.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.9 HAZARDS AND HAZARDOUS MATERIALS

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **HAZARDS AND HAZARDOUS MATERIALS**. Would the project: | | | | | |
| (a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | Less Than Significant | No | No | No | No |
| (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | Less Than Significant | No | No | No | No |
| (c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | Less Than Significant | No | No | No | No |
| (d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | No Impact | No | No | No | No |
| (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area? | No Impact | No | No | No | No |
| (f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | Less Than Significant | No | No | No | No |
| (g) Expose people or structures, either directly or indirectly to a significant risk of loss, injury or death involving wildland fires? | Less Than Significant | No | No | No | No |

### 3.9.1 IMPACT DETERMINATION IN THE EIR

***(a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

***(b) Would the Project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?***

#### *Construction*

As discussed in the Certified EIR, during the construction phase of a project, construction equipment and materials would include fuels, oils and lubricants, solvents and cleaners, cements and adhesives, paints and thinners, degreasers, cement and concrete, and asphalt mixtures, which are all commonly used in construction. Routine uses of any of these substances could pose a hazard to people or the environment and would be considered potentially significant.

Construction activities would be required to comply with numerous hazardous materials regulations designed to ensure that hazardous materials are transported, used, stored, and disposed of in a safe manner to protect worker safety, and to reduce the potential for the release of construction-related fuels or other hazardous materials into the environment, including stormwater and downstream receiving water bodies. Contractors would be required to prepare and implement hazardous materials business plans (HMBPs) that would require hazardous materials used for construction to be used properly and stored in appropriate containers with secondary containment to contain a potential release. In Los Angeles County, HMBPs are submitted to the local Certified Unified Program Agency (CUPA), Los Angeles County Fire Department (LACFD) Health Hazardous Materials Division (HHMD), for their review for compliance with hazardous materials regulations. The California Fire Code would also require measures for the safe storage and handling of hazardous materials, which are included in the CUPA review of HMBPs.

Construction contractors would be required to prepare an SWPPP for construction activities according to NPDES General Construction Permit requirements. The SWPPP would list the hazardous materials (including petroleum products) proposed for use during construction; describe spill prevention measures, equipment inspections, equipment and fuel storage; protocols for responding immediately to spills; and describe BMPs for controlling site runoff. The SWPPP would be submitted to the RWQCB, which would review both the SWPPP and the required inspection reports for compliance with the Construction General Permit.

In addition, the transportation of hazardous materials would be regulated by the US Department of Transportation (USDOT), Caltrans, and the California Highway Patrol (CHP). Together, federal and state agencies determine driver-training requirements, load labeling procedures, and container specifications designed to minimize the risk of accidental release.

Next, in the event of a spill that releases hazardous materials at a project site, a coordinated response would occur at the federal, state, and local levels. The LACFD HHMD is the local hazardous materials response team. In the event of a hazardous materials spill, the police and fire departments would be simultaneously notified and sent to the scene to respond and assess the situation.

Finally, implementation of some projects may include the demolition and removal of existing buildings and structures. Some buildings and structures may include hazardous building materials, such as asbestos-containing materials (ACM), lead-based paint (LBP), polychlorinated biphenyls (PCBs), mercury, and Freon. If improperly managed, demolition activities could exposure construction workers, the public, and the environment to these hazardous materials. Numerous

existing regulations require that demolition and renovation activities that may disturb or require the removal of materials that consist of, contain, or are coated with ACM, LBP, PCBs, mercury, Freon, and other hazardous materials must be inspected and/or tested for the presence of hazardous materials. If present, the hazardous materials must be managed and disposed of in accordance with applicable laws and regulations. Compliance with existing regulations is a condition of demolition and construction permits.

In the case of ACM and LBP, all work must be conducted by a state-certified professional, which would ensure compliance with all applicable regulations. If ACM and/or LBP are determined to exist onsite, a site-specific hazard control plan must be prepared detailing removal methods and specific instructions for providing protective clothing and equipment for abatement personnel. A state-certified LBP and/or an ACM removal contractor would be retained to conduct the appropriate abatement measures as required by the plan. Wastes from abatement and demolition activities would be disposed of at a landfill permitted to accept such waste. Once all abatement measures have been implemented, the contractor would conduct a clearance examination and provide written documentation to the appropriate regulatory agency documenting that testing and abatement have been completed in accordance with all federal, state, and local laws and regulations. Equipment and materials with PCBs, mercury, and Freon, are managed through the Universal Waste Rule. In the case of PCBs, electrical transformers and older fluorescent light ballasts not previously tested and verified to not contain PCBs must be tested. If PCBs are detected above action levels, the materials must be disposed of at a licensed facility permitted to accept the materials. In the case of mercury in fluorescent light tubes and switches, the identification, removal, and disposal of the materials must be removed without breakage and disposed of at a licensed facility permitted to accept the materials. In the case of Freon or other refrigerants, the refrigerants must be directed to licensed recycling and reuse facilities permitted to handle the refrigerants. The Certified EIR concluded that compliance with the numerous laws and regulations discussed above would limit the potential for projects to create a significant hazard to the public or the environment through the transport, use, handling, disposal, or accidental release of hazardous materials, and thus, this impact would be less than significant.

***Operation***

As discussed in the Certified EIR, once constructed, projects operating within the City may use chemicals associated with their particular business, some of which may be hazardous materials. The routine use or an accidental spill of hazardous materials could result in inadvertent releases, which could adversely affect employees, the public, and the environment. Businesses that use hazardous materials would be required to prepare and implement an HMBP that would require hazardous materials used in operations to be used properly, stored in appropriate containers with secondary containment to contain a potential release, and disposed of at facilities permitted to accept the waste. All hazardous materials are required to be stored and handled according to manufacturer's directions and local, state and federal regulations. The California Fire Code would also require measures for the safe storage and handling of hazardous materials. In addition, businesses would be required to comply with the local Municipal Separate Storm Sewer System (MS4) permit development standards, which would reduce pollutants and runoff flows from new developments using BMPs and Low Impact Development (LID)/post-construction standards.

The General Plan Update also includes Guiding Policies CSES-G-7 and CSES-G-14 through CSES-G-16 and Implementing Policies CSES-P-25 through CSES-P-30, CSES-P-33, and CSES-P-35, which would "minimize the threat to the public health and safety and to the environment posed by a release of hazardous materials," would help to reduce any impacts associated with the use, transportation, disposal, or accidental release of hazardous materials. The Certified EIR concluded that compliance with the numerous laws and regulations discussed above that govern the transportation, use, handling, and disposal of hazardous materials would limit the potential for

impacts due to the transportation, use, handling, disposal, or accidental release of hazardous materials and, thus, this impact would be less than significant.

***(c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

As discussed in the Certified EIR, there are numerous schools within the City limits, and many projects associated with the General Plan Update would likely be located within one-quarter mile of one or more schools. The construction and operations activities discussed previously in the response to Checklist Question 3.9.1(a) and 3.9.1(b) could include the use of hazardous materials. If the site using hazardous materials is located within one-quarter mile of a school, a release could adversely affect a school. However, required compliance with the numerous laws and regulations that govern the transportation, use, handling, and disposal of hazardous materials and adherence with General Plan Guiding Policies CSES-G-7 and CSES-G-14 through CSES-G-16 and Implementing Policies CSES-P-25 through CSES-P-30, CSES-P-33, and CSESP-35 would limit the potential for creation of hazardous conditions due to the use or accidental release of hazardous materials and, as concluded in the Certified EIR, would render this impact less than significant.

***(d) Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

As discussed in the Certified EIR, both active and closed hazardous materials investigation and cleanup sites are located within the City limits. Active sites are currently undergoing investigation and cleanup. If a project is located on or near an active site, the construction activities may encounter soil and/or groundwater with chemical concentrations above screening levels that could adversely affect workers, the public, and the environment. In addition, although the closed sites would not be anticipated to have chemicals in soil and/or groundwater at concentrations above screening levels, construction activities may encounter residual levels of chemicals. Finally, construction activities could also encounter currently unknown hazardous materials that are not currently listed but would be upon their discovery. The impact of encountering hazardous materials would be reduced to less than significant levels through the implementation of General Plan Guiding Policies CSES-G-7 and CSES-G-14 through CSES-G-16 and Implementing Policies CSES-P-25 through CSES-P-30, CSES-P-33, and CSES-P-35, which require the minimization of threats to the public health and safety and to the environment posed by a release of hazardous materials. Compliance with these policies and applicable regulations would ensure that plans would be in place that provide procedures for the testing, handling, disposal, and remediation of hazardous materials. Therefore, the Certified EIR concluded that the impact would be less than significant.

***(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?***

As discussed in the Certified EIR, the Compton/Woodley Airport is the only airport located within two miles of the City limits. The Compton/Woodley Airport is included in the Los Angeles County Airport Land Use Plan (ALUP), which requires that new development in the City not fall within the airports noise contours or airport influence area. Per the requirements of the Los Angeles County ALUP, new non-conforming land uses or major new development projects would be subject to review for compatibility by the County's Airport Land Use Commission. The ALUP contains designated zones within which certain off-airport activities would be deemed incompatible, such as

the construction of structures that exceed certain heights, facilities that could attract birds and other wildlife that could pose a hazard to aviation, and the construction of uses that would be at risk in the event of an aviation accident (schools, hospitals, etc.). By law, the Commission is vested with the legal authority to require modification of proposed projects that could conflict with safe and efficient airport operations. Accordingly, if any off-airport projects are proposed within these designated zones, they would be required to undergo review and approval by the Commission, and a determination of consistency with the ALUP would have to be made. As such, new projects in the vicinity of the airport would need to be consistent with the ALUP, and safety hazards for people working and/or residing in the area would be avoided. Additionally, the implementation of General Plan Guiding Policies NO-G-1 and NO-G-2 and Implementing Policy NO-P-1, would ensure maximum efficiency in noise abatement efforts, would reduce any impacts associated with noise hazards. Accordingly, development associated with the General Plan Update would not place people or structures in such a manner as to create a safety or noise hazard. The Certified EIR concluded the impact would therefore be less than significant.

***(f) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

As discussed in the Certified EIR, the General Plan Update includes Implementing Policies CSES-P-27, CSES-P-30 through CSES-P-32, and CSES-P-34, which would require the City to ensure emergency planning, designated evacuation routes, safe access routes to communication centers, hospitals, airports, staging areas, and fuel storage sites, and that projects provide adequate road standards, driveway widths, and road clearances around structures consistent with local and state requirements to ensure adequate emergency access. New projects would be required to be consistent with these policies. Therefore, the Certified EIR concluded the impact relative to proximity to an emergency response or evacuation would be less than significant.

***(g) Would the Project expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?***

As discussed in the Certified EIR, the City is not within a Very High Fire Hazard Severity Zones (VHFHSZ) and is not in the vicinity of one. Nevertheless, all construction activities would be required to comply with all applicable fire protection and prevention regulations specified in the California Fire Code, Hazardous Materials Transportation regulations, and Cal/OSHA regulations. These requirements include various measures such as accessibility of firefighting equipment, proper storage of combustible liquids, no smoking in service and refueling areas, and worker training for firefighter extinguisher use. In addition, General Plan Implementing Policy CSES-P-34, which serves to minimize the effects from natural and urban disasters to reduce impacts to the community, requires coordination efforts with the LACFD to ensure their capability to address fires. Compliance with all applicable regulations and plans would further minimize the potential for construction activities to cause a wildland fire.

The General Plan Update also includes Implementing Policies CSES-P-27, CSES-P-30 through CSES-P-32, and CSES-P-34, which serve to identify, establish, and maintain safe emergency procedures and evacuation routes. These policies would encourage greater cooperation with LACFD to ensure their capability to address fires and other emergencies. In addition, facilities that use or store hazardous and flammable materials would be required to comply with all applicable fire codes and fire protection requirements established by the California Fire Code, Hazardous Materials Transportation regulations, and Cal/OSHA requirements. As such, the Certified EIR concluded that the operation of projects would not substantially increase the risk of wildland fires within the project area. For these reasons, the General Plan Update would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires, and thus there would be no impact.

**General Plan Update Policies that Address Hazards and Hazardous Materials**

***Community Services, Education and Safety***

*Guiding Policies*

CSES-G-7 Provide a safe environment to live, work, and play for Carson residents and visitors.

CSES-G-14 Protect Carson residents and workers from hazardous material exposure and minimize the threat to the public health and safety and to the environment posed by a release of hazardous materials.

CSES-G-15 Strive to minimize the effects from natural and anthropogenic disasters to reduce, to the extent possible, the social, safety, health, and economic impacts that these may have on the community.

CSES-G-16 Continue mitigating against and restricting hazardous material usage in efforts to reduce pollution and hazard burden on Carson residents.

*Implementing Policies*

CSES-P-25 Coordinate with other jurisdictions and agencies on disaster preparedness regarding heavy industrial uses, including incidents related to the transportation of hazardous materials, pipelines, oil fields, refineries, fires, and methane gas, among others.

CSES-P-26 Minimize the threat to public health and safety and the environment through strict enforcement of rules and regulations and by working closely with first responders.

CSES-P-27 Minimize the threat of a release of hazardous materials through strict enforcement of rules and regulations, monitoring business operations which handle hazardous materials through the permitting process, and identifying emergency procedures and evacuation routes.

CSES-P-28 Regulate development on sites with known contamination of soil or groundwater to ensure that construction workers, future occupants, adjacent residents, and the environment are adequately protected from hazards associated with contamination.

CSES-P-29 Continue to require remediation of hazardous material releases from previous land uses as part of any redevelopment activities.

CSES-P-30 Continue to work with various City departments and other jurisdictions, including the Public Safety Services and County Fire and Sheriff's Departments, to provide Carson residents with updated information regarding emergency preparedness and disaster planning regarding seismic events and responses to hazards.

CSES-P-31 Maintain and update as necessary or produce plans that specifically address hazards and that identifies emergency response and recovery actions in the event of an incident. Such plans include the State Emergency Management System (SEMS) Multi-Hazard Function Plan and the Natural Hazards Mitigation Plan.

CSES-P-32 Review neighborhood access needs and ensure safe evacuation routes, especially for residential areas near refineries and heavy industry.

CSES-P-33 Strictly enforce federal, state and local laws and regulations relating to the use, storage, and transportation of toxic, explosive, and other hazardous and extremely hazardous materials to prevent unauthorized discharges.

CSES-P-34 Continue coordination efforts with the LACFD to ensure their capability to address fires and other emergencies at refineries, tank farms, and other heavy industrial facilities within the City.

CSES-P-35 Support environmental remediation of contaminated soils and hazardous waste sites.

***Circulation***

*Guiding Policies*

CIR-G-4 Encourage the development of a multimodal freight transportation system that balances the need for effective and efficient transportation of goods with the health and wellbeing of the community.

*Implementing Policies*

CIR-P-10 Direct commuter traffic to move through the City primarily on arterial streets, and on collector streets as appropriate. Consider traffic calming strategies.

CIR-P-11 Encourage the use of neighborhood traffic management tools to mitigate neighborhood intrusion by commuter traffic and improve conditions for pedestrians and bicyclists.

CIR-P-28 Focus truck traffic onto appropriate arterial corridors in the City by clearly marking truck routes and posting appropriate signage to provide for the effective transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses. While the City has identified truck routes (Figure 3-8), the designation of truck routes does not prevent trucks from using other roads or streets to make deliveries to individual addresses. Seeking community input around the issue and general observation of traffic patterns as online shopping and associated deliveries increase in the future will help in developing strategies to reduce use of non-designated corridors and limit disruption and potentially regulate truck movement.

CIR-P-29 Retain and strengthen ordinances restricting trucks from residential neighborhoods, using strategies such as time-of-day restrictions.

CIR-P-30 Conduct a study reviewing truck routes that are designated adjacent to residential neighborhoods. The City will explore where truck routes are redundant or unnecessary and could be removed without negative impacts to other residential neighborhoods. Segments of truck routes adjacent to residential neighborhoods are shown in Figure 3-9.

***Noise***

*Guiding Policies*

NO-G-1 Maintain healthy sound environments and protect noise-sensitive uses from excessive noise exposure.

NO-G-2 Continue efforts to incorporate noise considerations into land use planning decisions and guide the location and design of noise-generating facilities, such as transportation and industrial facilities, to minimize the effects of noise on adjacent land uses.

*Implementing Policies*

NO-P-1 Use the noise and land use compatibility matrix (Table 9-1) and Future Noise Contours map (Figure 3.11-4 in Section 3.11 of the [Certified] EIR) as criteria to determine acceptability of a land use. Seek to limit new noise-sensitive uses—including schools, hospitals, places of worship, and homes—where noise levels exceed "Normally Acceptable" or "Conditionally Acceptable" levels if alternative locations are available for the uses in the City, or impose appropriate mitigation measures to bring noise levels down to acceptable levels.

**Mitigation Measures**

None required.

### 3.9.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

***(b) Would the Project create a significant hazard to the public or the environment through the reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment?***

Construction of the Modified Project would involve the temporary use of potentially hazardous materials, including vehicle fuels, oils, lubricants, solvents, cleaners, transmission fluids, paint, thinners, and degreasers. The use of these hazardous materials are typical for construction activities and would be handled in compliance with all applicable standards and regulations. The existing City Hall has the potential to have ACMs and/or LBP since the building was constructed before the 1980s. Renovating the existing City Hall has the potential to release ACMs and/or LBP.

Operations of the Modified Project would involve limited use and storage of common hazardous substances, such as cleaning supplies, pesticides, and other landscaping supplies. The use of common hazardous substances would be similar to those that are typically used for commercial and residential uses.

The Modified Project does not involve any uses or activities that would result in the use or discharge of unregulated hazardous materials and/or substances, or create a public hazard through the transport, use, or disposal of hazardous materials. Consistent with the Certified EIR, all hazardous materials used during construction and operational activities would be handled in compliance with the numerous standards and regulations discussed in the Certified EIR that govern the transport, use, handling, and disposal of hazardous building materials, including those that govern ACMs and LBPs. The Modified Project would also be required to adhere with the General Plan Update policies listed above. As the Modified Project would be required to comply with applicable standards and regulations pertaining to hazardous materials, as well as the applicable General Plan Update policies (listed above), the Modified Project would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

Construction and operations of the Entertainment Retail Option would involve the use of similar types of hazardous materials as the Modified Project. As with the Modified Project, all hazardous materials used during construction and operational activities would be handled in compliance with

the numerous standards and regulations discussed in the Certified EIR that govern the transport, use, handling, and disposal of hazardous building materials, including those that govern ACMs and LBPs. The Entertainment Retail Option would also adhere to the applicable General Plan Update policies listed above. Therefore, the Entertainment Retail Option would not create a significant hazard to the public or the environment through the routine transport, use, disposal, or accidental release of hazardous materials. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school***

Andrew Carnegie Middle School and Bonita Street Elementary School are located within a quarter mile of the Project Site. As discussed above in the response to Checklist Questions 3.9.1(a) and 3.9.1(b), construction of the Modified Project would involve the temporary use of potentially hazardous materials, and operations of the Modified Project would involve limited use and storage of common hazardous substances that are typically used for commercial and residential uses. Any hazardous materials used by the Modified Project would be acquired, handled, used, stored, transported, and disposed of in accordance with all applicable federal, state, and local requirements. The Modified Project would also be required to adhere with the General Plan Update policies listed above. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

Construction and operations of the Entertainment Retail Option would involve the use of similar types of hazardous materials as the Modified Project. As with the Modified Project, all hazardous materials used during construction and operational activities would be handled in compliance with the numerous standards and regulations discussed in the Certified EIR, including those that govern ACMs and LBPs. The Entertainment Retail Option would also adhere to the applicable General Plan Update policies listed above. Therefore, the Entertainment Retail Option would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

The California State Water Resources Control Board (SWRCB) and California Department of Toxic Substances Control (DTSC) each maintain a database (GeoTracker and EnviroStor, respectively) that provides access to detailed information on hazardous waste sites and their cleanup statuses. GeoTracker focuses on sites that impact or have the potential to impact water quality in California, with an emphasis on groundwater. EnviroStor focuses on hazardous waste facilities and sites with known contamination or sites with possible reasons for further investigation. The Project Site not listed on the Geotracker database.[25] The Project Site is listed on the EnviroStor database as being inactive and needs evaluation. According to the information provided on the EnviroStor database, no previous assessment activities have been conducted at the Project Site and the Project Site is being assessed to provide specific information on potential environmental hazards that may need to be further investigated, addressed or cleaned up in order for the City to renovated City Hall and

[25]Department of Toxic Substances Control, *GeoTracker*, https://geotracker.waterboards.ca.gov/, accessed September 2025.

develop the Project Site with residential and commercial uses.[26] The Modified Project would be required to comply with all applicable federal, state, and local requirements pertaining to hazardous materials, as well as the applicable General Plan Update policies listed above. Therefore, the Modified Project would not create a significant hazard to the public or the environment, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***Entertainment Retail Option***

The Entertainment Retail Option would occur on the same site and would involve the same type of assessment as the Modified Project. The Modified Project would be required to comply with all applicable federal, state, and local requirements pertaining to hazardous materials, as well as the applicable General Plan Update policies listed above  Therefore, the Modified Project would not create a significant hazard to the public or the environment, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard or excessive noise for people residing or working in the project area?***

The Project Site is not located in an area with an airport land use plan. Additionally, the Project Site is not within two miles of any public or public use airports, or private air strips. The closest airport to the Project Site is Compton/Woodley Airport, which is approximately 3.8 miles north of the Project Site. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same Project Site as the Modified Project. As with the Modified Project, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(f) Would the Project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

The 2024 Hazard Mitigation Plan (HMP) is the City's emergency response plan. It describes the hazards that threaten the City and outlines long-term strategies to protect people, properties, and the environment. The HMP addresses multi-hazard issues, and hazards related to earthquakes, flooding, and windstorms. The HMP provides pre-disaster measures that assist the City in reducing risk and preventing loss from future hazard events.[27] The Modified Project would not involve any uses or activities that would interfere with the HMP. The Modified Project would incorporate plants with low and moderate water use, along with sustainable stormwater management strategies, such as swales, infiltration trenches, rain gardens, permeable paving, runnels, and flow-through planters. Structures on the Project Site would be designed to conform to the CBC seismic standards, as well as all other applicable codes and standards to limit structural damage associated with strong seismic ground shaking and seismic-related ground failures. As discussed in the response to Checklist Question 3.7.2(a.iii), the Modified Project would implement the recommendations contained in the project-specific geotechnical investigation report, which would ensure that future structures on the Project Site would be constructed to withstand seismic-related ground failures. The Modified Project would

[26]Department of Toxic Substances Control, *EnviroStor*, https://www.envirostor.dtsc.ca.gov/public/, accessed March 2025.

[27]City of Carson, 2024 *Hazard Mitigation Plan*, adopted September 2, 2025.

comply with all regulations and requirements aimed to reduce risks associated with natural and man-made hazards.

The City's General Plan Community Services, Education, and Safety Element identify natural, man-made, and technological hazards and how to plan for these hazards in the City. The primary Emergency Operations Center (EOC) is City Hall, which is located on the Project Site. Should City Hall be damaged, an alternate EOC would be activated. The City has also created a list of numerous locations within the City that would be used in case of a disaster or major emergency. The City's emergency plan would continue to be in operation even with implementation of the Modified Project.

The Project Site is located adjacent to two City-designated evacuation routes: Avalon Boulevard and Carson Street.[28] The Modified Project would improve the Carson Street streetscape with wider sidewalks and trees on north side of the street adjacent to the Project Site, special paving and/or art to promote safe pedestrian paths and provide flexibility to host special events by street closure between Avalon Boulevard and Civic Plaza Drive.

Although construction of the Modified Project may involve temporary lane closures to Avalon Boulevard and Carson Street, these roadways would remain accessible to vehicular traffic and emergency vehicles would still be able to travel along these roadways. Access to all surrounding properties would be maintained.

During Modified Project operations, Carson Street between Avalon Boulevard and Bonita Street/Civic Plaza Drive may temporarily close for special events. The temporary closure of Carson Street would block access to the mobile home community, child development center, and medical offices and urgent care on the south side of Carson Street. It is the policy of the City's Public Works Department that street and lane closures are not longer than 72 hours. To ensure that all properties along Carson Street are accessible in the event of an emergency, the Sheriff's Station, City's Transportation Division, and Fire Department would review the street and lane closures requests and ensure that street closures for special events would not interfere with evacuation routes in the surrounding area and that all properties have access to evacuation routes. Additionally, the Modified Project would be required to comply with General Plan Update Implementing Policy CSES-P-32, which requires the needs of neighborhood access be reviewed and ensure safe evacuation routes are provided. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option may temporarily close Carson Street between Avalon Boulevard and Bonita Street may temporarily close for special events. Street closures would be reviewed by the Sheriff's Station, City's Transportation Division, and Fire Department to ensure that street closures for special events would not interfere with evacuation routes in the surrounding area and that all properties have access to evacuation routes. Additionally, the Entertainment Retail Option would be required to comply with General Plan Update Implementing Policy CSES-P-32, which requires the needs of neighborhood access be reviewed and ensure safe evacuation routes are provided. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[28]City of Carson, *2040 General Plan*, adopted April 4, 2023.

***(g) Would the Project expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?***

The Project Site is not located in a fire hazard severity zone, as identified by the California Department of Forestry and Fire Protection (CalFire), and the Modified Project would not require any brush clearing, vegetation management, or fuel modification for this zone.[29] The Project Site is located in an urbanized area and is not located within or adjacent to a wildland area. The Modified Project would not involve activities that would expose people or structures to the risk of loss, injury, or death involving wildland fires. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project. The Entertainment Retail Option does not involve activities that would expose people or structures to the risk of loss, injury, or death involving wildland fires. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.9.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.9.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.9.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.9.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

[29]California Department of Forestry and Fire Protection, *Fire Hazard Severity Zone Viewer*, https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/, accessed March 2025.

# 3.10 HYDROLOGY AND WATER QUALITY

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **HYDROLOGY AND WATER QUALITY**. Would the project: | | | | | |
| (a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality? | Less Than Significant With Mitigation | No | No | No | No |
| (b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin? | Less Than Significant | No | No | No | No |
| (c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: | | No | No | No | No |
| i) result in substantial erosion or siltation on- or off-site; | Less Than Significant | No | No | No | No |
| ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site; | No Impact | No | No | No | No |
| iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or | Less Than Significant | No | No | No | No |
| iv) impede or redirect flood flows? | Less Than Significant | No | No | No | No |
| (d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | Less Than Significant | No | No | No | No |
| (e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? | No Impact | No | No | No | No |

## 3.10.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?*

As discussed in the Certified EIR, the General Plan Update would have a significant environmental impact if it would result in the violation of water quality standards and waste discharge requirements set out in Municipal Permit Order No. R4-2012-0175, NPDES Permit CAS004001, issued by the Los Angeles RWQCB. Violation of these permits could occur if the development anticipated in the General Plan Update would substantially increase pollutant loading levels in the sanitary sewer system or in groundwater underlying the City, either directly through the introduction of pollutants

generated by industrial land uses, or indirectly through stormwater pollution. As NPDES Permit CAS004001 is based on the federal Clean Water Act, compliance with the Porter-Cologne Water Quality Control Act (Division 7 of the Water Code, commencing with Section 13000), applicable federal and state regulations, all applicable provisions of statewide water quality control plans and policies adopted by the SWRCB, the Basin Plan adopted by the RWQCB, the California Toxics Rule, the California Toxics Rule Implementation Plan, and NPDES would ensure compliance with other applicable plans and regulations pertaining to water quality.

While the City is largely built out, potential development and redevelopment under the General Plan Update could increase the area of impervious surfaces within the City and, thus, could increase the amount of runoff and associated pollutants during both construction and operation. However, all construction activity within the City that has the potential to negatively affect water quality is required to comply with the MS4 Permit. In addition, the City's Runoff Pollution Control Ordinances would further protect water quality in the City. Implementation of practices required by the MS4 Permit and local ordinances would reduce the volume of runoff from impervious surfaces and increase the amount of natural filtration of pollutants from stormwater occurring on site, generally improving the quality of stormwater before it enters the City's and/or county's stormwater system.

Finally, the General Plan Update contains policies that require the City to support RWQCB regulations and standards, ensure that individual developments incorporate BMPs, prepare and implement applicable water quality plans, coordinate with federal, state, and local agencies to monitor industrial discharges, adopt a master plan for the Dominguez Channel to improve water quality, and, where feasible, support the restoration and rehabilitation of channelized waterways and promote naturalized drainage channels. Overall, the General Plan's policies would promote improved water quality in the City and continued compliance with federal, state, and local water quality regulations, and would ensure that water quality is protected to the maximum extent practicable.

The Certified EIR concluded that for the reasons stated above, the General Plan Update would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality, and this impact is considered less than significant.

***(b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

As discussed in the Certified EIR, a small portion of the City's potable water supply relies on groundwater. However, the groundwater basins serving the City are adjudicated and, thus, have limits on the amount of groundwater that is pumped for potable use. Therefore, the potential for overdraft is limited. With respect to groundwater recharge, as the City is largely built out and primarily consists of impervious surfaces, implementation of the General Plan Update would not result in substantial increases of impervious surfaces such that groundwater recharge would be hindered. Additionally, groundwater recharge basins for the Central Basin are in the Rio Hondo and San Gabriel Coastal Spreading Grounds along the Rio Hondo and the San Gabriel Rivers, and groundwater recharge for the West Coast Basin is primarily done through injection wells. Therefore, replenishment of groundwater is not reliant on natural recharge or percolation within the City. The Certified EIR concluded that, for these reasons, the impact of the General Plan Update with respect to the depletion of groundwater supplies or interference with groundwater recharge would be less than significant.

***(c.i) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?***

***(c.ii) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

***(c.iii) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

***(c.iv) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?***

As discussed in the Certified EIR, implementation of the General Plan Update would not involve the direct alteration of existing streams, rivers, or other drainage patterns. However, potential future development or redevelopment allowed under the General Plan Update could impact the existing drainage system. While the City is largely built out, potential development and redevelopment under the General Plan Update could increase the area of impervious surfaces within the City and thus could increase runoff from these sites into the local storm drains in the City. This increase in runoff volumes could in turn result in hydromodification effects—such as erosion, siltation, and flooding—on the hydrological systems within the City, which occur when rainfall runoff is increased from impervious areas above the natural rainfall rate that would otherwise occur.

The City recognizes the importance of water quality and preventing hydromodification. Any development that would occur under the General Plan Update would be subject to the City's Floodplain Management and Stormwater and Urban Runoff Pollution Control Ordinances that help prevent flood damage resulting from hydromodification. Adherence to the City's ordinances would limit surface runoff from development under the General Plan Update, reducing siltation and erosion. In addition, the General Plan Update includes policies that seek to reduce localized flooding and ensure that areas experiencing localized flooding problems are targeted for storm drain improvements. The Certified EIR concluded that for these reasons, the impact of the General Plan Update with respect to the alteration of drainage patterns would be less than significant.

***(d) Would the Project in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

As discussed in the Certified EIR, the City is located approximately six miles inland from the Pacific Ocean and two miles inland from the Los Angeles/Long Beach Harbor area. The City is not located in a tsunami inundation hazard area and there are no enclosed large water bodies within the City with potential for seiche effects or waves generated by failure of retaining structures. In addition, a vast majority of the City is outside of the flood hazard zone. Finally, development anticipated in the General Plan Update would comply with the City's existing regulations pertaining to flooding hazards and adhere to previously described General Plan Update policies addressing flooding. Therefore, the Certified EIR concluded that the impact of the General Plan Update with respect to flood hazard zones would be less than significant.

### *(e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

As discussed in the Certified EIR, development anticipated by the General Plan Update could potentially degrade water quality. However, development would be subject to the RWQCB requirements and the CMC. Furthermore, the General Plan Update contains policies pertaining to water quality, as described previously. Overall, the General Plan's policies would promote improved water quality in the City and continued compliance with federal, state, and local water quality regulations, and would ensure that water quality is protected to the maximum extent practicable. Adjudicated basins are not required to prepare Groundwater Sustainability Plans (GSPs) but are required to submit annual basin reports to fulfill Sustainable Groundwater Management Act (SGMA) requirements. As a result, no GSP has been prepared for either the West Coast or Central Basins. Therefore, the Certified EIR concluded that the impact of the General Plan Update with respect to a conflict with a water quality control plan or a GSP would be less than significant.

**General Plan Update Policies that Address Hydrology and Water Quality**

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-9 Maintain the quality of surface water and groundwater resources and prevent their contamination

*Implementing Policies*

OSEC-P-14 Support Los Angeles Regional Water Quality Control Board (RWQCB) regulations and standards to maintain and improve the quality of both surface water and groundwater resources.

OSEC-P-15 Continue working with the Los Angeles RWQCB in implementation of the National Pollutant Discharge Elimination System (NPDES) program. As part of the NPDES permitting process, require developments to incorporate structural and non-structural best management practices (BMPs) to mitigate or reduce the projected increases in pollutant loads. Do not allow post-development runoff from a site that would cause or contribute to an exceedance of receiving water quality objectives or has not been reduced to the maximum extent practicable.

OSEC-P-16 Prepare and implement applicable plans such as a Water Quality Improvement Plan, Integrated Regional Water Management Plan, Load Reduction Plan or others as needed to comply with applicable regulations.

OSEC-P-17 Coordinate with the U.S. EPA, CalEPA, LA RWQCB, and other related jurisdictions on monitoring industrial discharges to ensure that wastewater quality continues to meet various federal, state, and regional standards.

OSEC-P-18 Establish and implement best management practices in the Carson Addendum to Dominguez Channel Watershed Management Area Group for protection of surface and groundwater quality. Review and update as needed.

OSEC-P-19 Strive to adopt a Master Plan for the Dominguez Channel through partnerships with the Los Angeles County Flood Control District to improve the water quality and create an amenity for the community.

OSEC-P-20 Where feasible, support the restoration and rehabilitation opportunities of channelized waterways and promote the usage of naturalized drainage channels within the City.

OSEC-P-21 Coordinate the needs of pollution management with the overlapping (and sometimes competing) habitat management, flood management, capital improvement projects, development, aesthetic, and other open space needs.

OSEC-P-22 Prepare and disseminate information about the potentially harmful effects of toxic chemical substances in the water supply and safe alternative measures, including information about safe alternatives to toxics for home and garden use.

***Community Services Education and Safety***

*Guiding Policies*

CSES-G-12 Strive to minimize injury and loss of life, damage to public and private property and infrastructure, and economic and social disruption caused by flood hazards.

CSES-G-13 Incorporate strategies to reduce flooding impacts caused by urban runoff.

*Implementing Policies*

CSES-P-23 Ensure that areas experiencing localized flooding problems are targeted for storm drain improvements. To this end, work closely with Los Angeles County Department of Public Works and other cities in the South Bay region to ensure that facilities are adequate to accommodate storm waters.

CSES-P-24 Utilize open space to mitigate flood impacts and preserve as open space areas that cannot be mitigated for flood hazard.

**Mitigation Measures**

None required.

### 3.10.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?***

**Construction**

Construction of the Modified Project would require site clearing, grading, and building construction activities. During construction, surface water quality could potentially be affected by loose soils, debris, construction wastes, and fuels that could be carried off-site by surface runoff in into local storm drains, which drain into water resources. However, the Modified Project would be required to comply with all federal, state, and local regulations related to water quality standards and wastewater discharge.

Construction contractors would be required to comply with the NPDES permit program, which was created by the Clean Water Act to address water pollution from point sources (e.g., pipes, channels, and tunnels) that discharge pollutants to the waters of the United States. During construction of development associated with the Modified Project, management of storm water discharge would be controlled by BMPs as part of the NPDES Construction General Permit. As required by the NPDES Construction General Permit, development associated with the Modified Project would be required to prepare an SWPPP prior to the beginning of construction for each development on the Project Site. During the plan review process, the City's Public Works Department Engineering Division would review the SWPPP for compliance with stormwater requirements.

The historically highest groundwater level on the Project Site is approximately 20 feet below ground surface. As several levels of subterranean parking would be constructed on the Project Site, groundwater could potentially be encountered during earthwork, such as excavation. Dewatering may be necessary to prevent structural damage and foundation issues if construction of the subterranean parking garages reaches to the depth of groundwater on the Project Site. In accordance with Section 1803 of the CBC, a site-specific geotechnical investigation report would be conducted to determine the current groundwater level and whether dewater would be necessary. The Modified Project would be required to implement the recommendations identified in the geotechnical report to ensure that the subterranean parking garages would be structurally stable. Dewatering would produce groundwater that would need to be discharged to a nearby storm drain or sanitary sewer inlet in accordance with the proper permits from the Regional Water Quality Control Board. A review of the Geotracker database indicates that the Project Site does not have any active groundwater contamination, and three active leaking underground storage tank (LUST) cleanup sites are within 1,000 feet of the Project Site.[30] It is possible that groundwater beneath the Project Site may contain pollutants. If contamination is present in the water pumped during dewatering, then treatment of the contaminated groundwater would be required to meet the discharge permit requirements from the RWQCB.

The construction contractors would be required to comply with applicable regulations in Article V, Chapter 8 of the CMC (Storm Water and Urban Runoff Pollution Control Ordinance) and the discharge requirements from the RWQCB. Compliance with the NPDES Construction General Permit and applicable regulations in the CMC would reduce the risk of water degradation from soil erosion and other pollutants related to construction activities. Therefore, construction associated with the Modified Project would not violate any water quality standards or waste discharge requirements during construction.

**Operation**

The Modified Project would be required to comply with the City's standard urban stormwater mitigation plan (SUSMP) requirements, which includes LID structural and non-structural BMPs, source control BMPs, and structural and non-structural BMPs for specific types of uses. LID is a stormwater management strategy that emphasizes conservation and the use of existing natural site features integrated with stormwater controls to most closely mimic natural hydrologic patterns in residential, commercial, and industrial settings. LID controls effectively reduce the amount of impervious areas of a project site and promote the use of infiltration and other controls that reduce runoff. Source control BMPs would prevent runoff contact with pollutant materials that would otherwise be discharged into the municipal storm drains. The proposed Specific Plan identifies LIDs that could be incorporated into development associated with the Modified Project to control stormwater at the source and allow it to slowly infiltrate and filter through plants and soils. These low impact sustainable stormwater designs include the installation of swales, infiltration trenches, rain gardens, permeable paving, runnels, and flow-through planters. Curb extensions could also be installed to slow stormwater flows and filter and infiltrate stormwater before it reaches the storm drain network. The curb extensions could also take on the characteristics of bio-retention areas, swales, or planters. The project applicant would also be required to comply with applicable regulations in the City's Storm Water and Urban Runoff Pollution Control Ordinance (CMC Chapter 8). Therefore, the Modified Project would not violate any water quality standards or waste discharge requirements during operational activities. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[30]Department of Toxic Substances Control, *GeoTracker*, https://geotracker.waterboards.ca.gov/, accessed September 2025.

**Entertainment Retail Option**

The Entertainment Retail Option would be required to comply with the same water quality regulations and the Modified Project. SWPPP would be developed and BMPs would be implemented during construction. SUSMP would be developed during operational activities, and development associated with the Entertainment Retail Option would be required to implement LID controls from the proposed Specific Plan. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

The historically highest groundwater levels on the Project Site is approximately 20 feet below ground surface. As several levels of subterranean parking would be constructed on the Project Site, groundwater could potentially be encountered during excavation and construction activities. Dewatering may be necessary to prevent structural damage and foundation issues if construction of the subterranean parking garages reaches to the depth of groundwater on the Project Site. In accordance with Section 1803 of the CBC, a site-specific geotechnical investigation report would be conducted to determine the current groundwater level on the Project Site and whether dewater would be necessary. Development associated with the Modified Project would be required to implement the recommendations identified in the geotechnical report to ensure that the subterranean parking garages would be structurally stable. Although dewatering activities may be necessary to construct the proposed subterranean parking garages, the Project Site is not used for groundwater recharge and is not located near a groundwater recharge area. The Modified Project would not interfere substantially with groundwater recharge.

As discussed in the response to Checklist Question 3.10.1(a), a small portion of the City's potable water supply relies on groundwater. Groundwater basins serving the City, which include the Project Site, are adjudicated and, thus, have limits on the amount of groundwater that is pumped for potable use. Therefore, the potential for overdraft is limited, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would require the similar types of construction activities as the Modified Project. The Entertainment Retail Option would be required to prepare a site-specific geotechnical investigation report and implement the recommendations identified in that report to ensure that the subterranean parking garages would be structurally stable. Although dewatering activities may be necessary to construct the proposed subterranean parking garages, the Project Site is not used for groundwater recharge and is not located near a groundwater recharge area. Additionally, groundwater basins serving the Project Site are adjudicated and, thus, have limits on the amount of groundwater that is pumped for potable use. Therefore, the potential for overdraft is limited. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c.i) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?***

***(c.ii) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

***(c.iii) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

***(c.iv) Would the Project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?***

The Project Site is located in an urbanized area of the City with existing stormwater infrastructure in place. No streams or rivers are located within the Project Site, and the Project Site is located approximately 790 feet west of the Dominguez Channel. Surface runoff from the Project Site is currently diverted to existing storm drains. The Project Site is designated as Zone X (shaded) by the Federal Emergency Management Agency (FEMA), which is an area of one percent annual chance flood with average depths of less-than-one foot or with drainage areas less-than-one square mile.[31] Zone X (shaded) are areas with moderate flood hazard and are usually the areas between the limits of the 100-year and 500-year floods. It is protected from the 100-year flood by certified levees, such as the Dominguez Channel levee system.

During construction, on-site soils would temporarily be exposed to surface water runoff; however, the Modified Project would be required to comply with local, state, and federal regulations and standards related to water quality standards, wastewater discharge, and minimizing potential erosion. Management of storm water run-off and off-site discharge during construction activities associated with the Modified Project would be controlled by BMPs as part of the NPDES Construction General Permit, and developments associated with the Modified Project would be required to prepare an SWPPP, which would include BMPs to control sedimentation and erosion and to limit the amount of polluted runoff that enters the stormwater drainage system. Additionally, implementation of these BMPs would not cause a substantial increase in the rate or amount of surface run-off in a manner that would result in flooding on- or off-site during construction.

Based on the proposed open space and landscape plan for the Modified Project, the Modified Project would decrease the amount of impervious surface on the Project Site. Operations of the Modified Project would incorporate LID controls and BMPs as required by Section 5809 of the CMC. LID strategies would control stormwater at the source and allow it to slowly infiltrate and filter through plants and soils. The proposed Specific Plan identifies LID strategies that would potentially be implemented by future development on the Project Site. These strategies include the installation of swales, infiltration trenches, rain gardens, permeable paving, runnels, and flow-through planters.

[31]Federal Emergency Management Agency, *FEMA Flood Map Service Center*, https://msc.fema.gov/portal/search?AddressQuery=701%20carson%2C%20carson, accessed March 2025.

Curb extensions may also be installed to slow stormwater flow, filter stormwater, and allow stormwater to infiltrate before reaching the storm drain network. The curb extensions could take on the characteristics of bio-retention areas, swales, or planters. Additionally, structural and treatment control BMPs would be implemented as part of the City's SUSMP requirements under the City's Stormwater and Urban Runoff Pollution Control Ordinance (CMC Chapter 8) to prevent runoff contact with pollutant materials that would otherwise be discharged into the municipal storm drains. Additionally, the LID strategies, storm drains, and catch basins that would be installed as part of the Modified Project would control and limit flooding on the Project Site.

With implementation of BMPs during construction and LID controls and BMPs during operational activities, the Modified Project would not substantially alter the existing drainage pattern of the Project Site and its surrounding area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation, result in flooding, exceed the capacity of existing or planned stormwater drainage system or provided substantial additional sources of pollutants, or impede or redirect flood flows. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be required to comply with the same water quality regulations and the Modified Project. SWPPP would be developed and BMPs would be implemented during construction. SUSMP would be developed during operational activities, and development associated with the Entertainment Retail Option would be required to implement LID controls from the proposed Specific Plan. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project result in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

The Project Site is not within a coastal zone or tsunami inundation area. Additionally, the Project Site is not located near a body of water that is large enough to create a seiche during a seismic event. Thus, it is unlikely for inundation to occur on the Project Site due to a tsunami, seiche, or dam failure.

As discussed in the response to Checklist Question 3.10.2(c.iv), the Project Site is located within Zone X (shaded) by FEMA, which is an area with moderate flood hazard. The Modified Project would not involve the regular use or storage of large quantities of hazardous materials. While there is little that can be done if the Project Site is flooded, the risk of releasing pollutants during flooding would be consistent with the existing risks for the Project Site and its surrounding area. The Modified Project does not involve uses or activities that would exacerbate this risk and would incorporate LID strategies, storm drains, and catch basins, to minimize on- and off-site flooding. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be on the same site and would involve similar types of activities as the Modified Project. The Entertainment Retail Option would not involve the regular use or storage of large quantities of hazardous materials. The Entertainment Retail Option would incorporate LID strategies, storm drains, and catch basins, to minimize on- and off-site flooding and does not involve uses or activities that would exacerbate the risk of releasing pollutants due to project inundation. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(e) Would the Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

The Modified Project would be required to comply with applicable regulations associated with water quality. Compliance with these regulations would ensure that the Modified Project would be consistent with the *Water Quality Control Plan: Los Angeles Region Basin Plan* (Basin Plan). The Modified Project would not conflict with or obstruct implementation of the Basin Plan and no sustainable groundwater management plan is applicable to the Project Site. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be on the same site and would involve similar types of activities as the Modified Project. The Entertainment Retail Option would be required to comply with applicable regulations associated with water quality and, thus, would not conflict with or obstruct implementation of the Basin Plan. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.10.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.10.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.10.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.10.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.11 LAND USE AND PLANNING

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **LAND USE AND PLANNING**. Would the project: | | | | | |
| (a) Physically divide an established community? | No Impact | No | No | No | No |
| (b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | Less Than Significant With Mitigation | No | No | No | No |

## 3.11.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project physically divide an established community?*

As discussed in the Certified EIR, the General Plan Update would improve connectivity and land use consistency within and between existing neighborhoods, thereby providing more linkages within the City and the region. The General Plan outlines strategies for greater integration of uses in different parts of the City and a better connection between employment and residential uses, with more areas designated for mixed-use development. It recognizes the physical elements that help define the character of Carson, including existing residential neighborhoods, downtown Core, industrial/business centers, and corridors. This structure helps establish a clear multi-modal network throughout the City by focusing on both community destinations as well as the efficiency, safety, and convenience of the modes of transportation in between. Higher densities, especially in mixed-use designations, increase capacity for residential development near community-serving commercial, retail, and office uses as well as schools, parks, and recreational facilities, and proposed improvements to the bicycle, pedestrian, and road networks will make it easier for residents to travel throughout the community. Furthermore, changes to land use designations under the General Plan Update would consolidate designations to better reflect existing land uses and would not result in the division of any established community. Therefore, the Certified EIR concluded that future development allowed by the General Plan Update would not physically divide an established community, and the impact is less than significant.

### *(b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?*

As discussed in the Certified EIR, the General Plan Update provides policies and land use designations for future development and would replace the 2004 General Plan. Existing City regulations would be updated as needed to be consistent with and/or effectively implement the General Plan Update. Additionally, the City's Zoning Ordinance would be revised to implement the General Plan Update, as required by state law (Government Code Section 65860[a]), and it would translate the General Plan Update policies into specific use regulations, development standards, and performance criteria to govern development on individual properties. The Zoning Ordinance ultimately prescribes standards, rules, and procedures for development, while the Zoning Map will provide more detail than the General Plan Land Use Diagram. The General Plan Update includes

multiple policies from the 2004 General Plan and proposes more stringent policies for the purpose of avoiding or mitigating an environmental effect.

The City has adopted specific plans to tailor appropriate development standards and policies to individual neighborhoods. state law requires specific plans to be consistent with the General Plan. As of 2021, development under the specific plans is still underway. However, the General Plan Update takes these plans into consideration such that changes to land use designations within the boundaries of various specific plans, as well as throughout the City, will continue to be harmonious and consistent with existing land uses. For example, Development District 3 of the District at South Bay Specific Plan Area (north of Del Amo Boulevard) has been developed with 300 residential units on the 11-acre parcel; the changes the land use designation of this parcel from "Mixed Use – Residential" to "High Density Residential" to reflect the new use more accurately. Likewise, the Dominguez Technology Center Phase One Specific Plan Area (on the northwest corner of East University Drive and South Wilmington Avenue) is "Flex District" in place of "Light Industrial" to reflect existing office uses at that location. As such, redesignation under the General Plan Update is designed to increase consistency with existing uses following completion of development under these specific plans and would not result in any conflicts. General Plan Update policies would not conflict with policies included in these specific plans adopted for the purpose of avoiding or mitigating an environmental effect.

The City of Carson Planning Division has primary responsibility for administering the laws, regulations, and requirements that pertain to the physical development of the City. Specific duties relating to implementation of the General Plan Update would include preparing zoning and subdivision ordinance amendments, reviewing development applications, conducting investigations and making reports and recommendations on planning and land use, zoning, subdivisions, development plans, and environmental regulations.

The General Plan Update also must be consistent with regional and local plans. Policies within the General Plan Update integrate land use, housing, and transportation planning to achieve regional GHG emission reductions by promoting compact, infill, and mixed-use development, therefore supporting the Sustainable Communities Strategy (Connect SoCal). Moreover, General Plan Update policies encourage remediation and redevelopment of brownfield sites, improving the environmental quality of lands in the Planning Area. Additionally, the General Plan Update seeks to maintain consistency with the policies of the Los Angeles County General Plan and the Code of Ordinances. The General Plan Update designates the lands within the SOI as Light Industrial, Heavy Industrial, Low Density Residential, High Density Residential, Utilities, and Corridor Mixed Use. Light Industrial, Heavy Industrial, Utilities, and Low Density Residential designations are consistent with existing County zoning designations in these areas. Places that are designated as High Density Residential or Corridor Mixed Use—located at the intersection of Redondo Beach and Avalon boulevards as well as along Del Amo Boulevard at Wilmington and Santa Fe Avenues—reflect existing on-the-ground uses, including neighborhood commercial/retail and multi-family residential units, and have been "pre-zoned" to be consistent with the General Plan Update in the event that these areas of the SOI are annexed into City limits. Unless these lands are annexed, County land use designations and zoning apply.

The Certified EIR concluded that given that the General Plan Update does not conflict with any other agencies' applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, conflicts with existing local and regional plans and the Zoning Ordinance are expected to have a less-than-significant impact.

**General Plan Update Policies that Address Land Use and Planning**

***Land Use and Revitalization***

*Guiding Policies*

LUR-G-1 Maintain a balanced land use program that promotes a diversified economic base and capitalizes on Carson's location and assets – strong industrial economy, access to major freeways, rail corridors, airports, and the ports of Long Beach and Los Angeles, and the presence of California State University Dominguez Hills.

LUR-G-2 Balance employment and housing within the community to provide more opportunities for Carson residents to work locally, cut commute times, and improve air quality.

LUR-G-4 Promote a diversity of complementary uses in different parts of the City, including mixed flexible office space, retail, dining, residential, hotels, and other compatible uses, to foster vibrant, safe, and walkable environments, with flexibility to accommodate emerging uses and building typologies.

LUR-G-6 Encourage revitalization of corridors as pedestrian-oriented, mixed-use residential, retail, and office community spines, serving as focal points for neighborhood amenities and services, and helping foster neighborhood identity and vitality.

LUR-G-7 Develop Carson's central Core—extending approximately 1.7 miles both east-west along West Carson Street and north-south along Avalon Boulevard and including the South Bay Pavilion—into a vibrant, pedestrian-oriented mixed-use hub of the community, with housing, retail, and other commercial uses, and civic uses and community gathering spaces.

LUR-G-8 Promote development of a high-intensity Flex District in the "triangle" near at the I-405/I-110 interchange, capitalizing on the excellent regional access and potential availability of large sites to accommodate a diversity of commercial, residential, and light-industrial uses.

LUR-G-9 Locate medium and high-density development along major corridors and major re-development sites in the central Core, to focus housing near regional access routes, transit stations, employment centers, shopping areas, and public services.

LUR-G-11 Encourage mixed-use development (two or more uses within the same building or in close proximity on the same site), especially in the Core area, to promote synergies between uses.

*Implementing Policies*

LUR-P-8 Promote development of neighborhood-scaled commercial centers in residential areas to serve the everyday needs of nearby residents.

LUR-P-10 Support continued evolution of the West Carson Street (Carson's "main street"), with a vibrant mix of complementary commercial, residential, and civic uses. Do not permit new automobile-oriented establishments such as car washes, or drive-through uses with access directly from Carson Street.

LUR-P-14 Promote development of the Broadway/Figueroa Street as Business Mixed-Use. Focus on non-hazardous light industrial, maker, and research and development uses for this area. Live/work units or residential uses are permitted conditionally as part of a cohesive plan that acknowledges their location within a flexible/employment district,

considers the long-term development potential of adjacent properties, and presents a strategy for transition of industrial uses to residential uses.

LUR-P-16 Where larger parcels—such as the Shell site—are redeveloped, require development to implement urban design policies, including creation of smaller blocks (typically with no dimension larger than 300 to 600 feet dependent on use, with smaller blocks in residential areas) to create walkable, urban environments; buildings and landscapes that relate to the surroundings, with high-level of public-realm amenities, such as tree-lined streets; sidewalks, pedestrian paths, and crossings; and plazas and other gathering spaces for workers and visitors. Site planning for new construction should ensure that streets are lined with occupied buildings or landscapes, with parking and service facilities tucked behind or away from public streets.

LUR-P-18 Promote infill mixed-use development in either a vertical or horizontal configuration when aging shopping centers are redeveloped to create mixed-use corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.

***Community Character, Identity, and Design***

*Guiding Policies*

CCD-G-1 Foster Carson's sense of place and arrival through careful attention to building and public realm design, and cohesive streetscapes that promote community and neighborhood identity.

CCD-G-3 Promote the Core as Carson's energetic commercial, cultural, and residential center, promoting a diversity of building types and variety of options for living and working in the heart of the community.

CCD-G-6 Strengthen community identity within Neighborhood Villages through high quality building and streetscape design and promote attractive pedestrian connections to access neighborhood centers for local services and amenities.

*Implementing Policies*

CCD-P-1 Encourage mixed-use projects by allowing flexibility in site and building design standards outlined in the Carson Municipal Code Zoning Ordinance.

***Laud Use and Revitalization***

*Guiding Policies*

LUR-G-5 Provide opportunities for new residential development in a variety of settings, including through infill and redevelopment, without impacting existing neighborhoods or creating conflicts with industrial operations, while conserving mobile homes, which provide more affordable housing.

LUR-G-12 Promote adaptive reuse and environmental remediation of brownfield sites, sites with abandoned buildings and facilities, or underutilized properties with productive uses.

*Implementing Policies*

LUR-P-17 Ensure that new industrial uses in the Business Mixed-Use designation minimize adverse off site air quality, noise, or glare impacts incompatible with permitted residential.

LUR-P-21 Establish performance and development standards to allow a wide range of uses as long as those uses will not adversely impact adjacent uses. These performance and development standards are the minimum necessary to assure safe, functional, and environmentally sound activities. Details of this would need to be developed as part of the Zoning Code.

LUR-P-22 When industrial land directly adjacent to existing or permitted residential, parks, schools or other sensitive uses is developed or intensified, require a buffer of natural vegetation, open space, berms, and trees between the new residential development and industrial land. Other operation factors, including hours of operation, traffic, noise, and air quality impacts, shall be assessed and mitigated at time of project review.

LUR-P-23 Undertake planned development and specific plans for unique projects as a means to achieve high community standards, address neighborhood or significant site-specific issues, ensure compatibility between a number of uses, on large parcels, and when needed as part of a redevelopment or environmental remediation strategy. Such areas that would benefit from a specific plan include the Shell Site and South Bay Pavilion if redeveloped.

LUR-P-25 Update the City's Zoning Ordinance and Subdivision Regulations contained in the Municipal Code for consistency with the General Plan. This would include:

- Establishment of new base districts;
- Establishment of new overlay districts as appropriate;
- New development regulations that reflect policy direction contained throughout the Plan;
- Use regulations identifying permitted and conditionally permitted uses consistent with the policies applicable to the General Plan land use designation; and
- Minimum and maximum development intensities consistent with the General Plan land use policies

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-2 Seek opportunities for the restoration of natural open space during redevelopment of industrial or remediated landfills—including land currently used to produce resources—to create open space that supports outdoor recreation, protects public health and safety, and improves plant and animal habitat.

OSEC-G-4 Recognize and support the preservation of wildlife migration routes and special status species that are state or federally listed as Endangered, Threatened, or Rare.

OSEC-G-23 Undertake initiatives outlined in the Climate Action Plan to enhance sustainability by reducing the community's greenhouse gas (GHG) emissions and fostering green development patterns including buildings, sites, and landscapes.

**Mitigation Measures**

None required.

### 3.11.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

#### *(a) Would the Project physically divide an established community?*

The Modified Project would result in the renovation and repurposing of the existing City Hall building; the remodeling of the existing Carson Community/Event Center; and the construction of a new City Hall building, a performing arts center, a mixed-use residential building, a resort hotel, and several open space areas, including Jewel Plaza. Civic Center Drive would be removed and replaced with a New Street and the existing pedestrian bridge over Civic Center Drive could potentially be removed or reconstructed. Although Civic Center Drive would be replaced with the New Street, the New Street would continue to connect Desford Street to Carson Street and would pass through the proposed Jewel Plaza. Civic Plaza Drive would remain on the Project Site and would continue to connect Carson Street to the Project Site and the adjacent hotel and office building. The existing driveway along the eastern and northeastern portions of the Project Site would continue to connect Civic Plaza Drive to the uses north of the Project Site. Avalon Boulevard, Carson Street, and Desford Street would continue to provide access to the Project Site.

The Modified Project would improve pedestrian connectivity. Although the existing pedestrian bridge over Civic Center Drive could potentially be removed, pedestrian pathways would be developed throughout the Project Site (including the east-west pedestrian walkway) and would connect the different uses proposed on the Project Site with the streets adjacent to the Project Site. The existing sidewalk along the north side of Carson Street would be widened from 8 feet to 12 feet, and new crosswalks are proposed at the Carson Street/Avalon Boulevard intersection. In addition, a mid-block crossing would be provided near the front entry of the new City Hall building for pedestrian safety and mobility.

The Modified Project includes the potential to temporarily close Carson Street between Avalon Boulevard and Bonita Street/Civic Plaza Drive to host special events, which would block access to the mobile home community, child development center, and medical offices and urgent care on the south side of Carson Street. As discussed in the response to Checklist Question 3.9.2(f), above, it is the policy of the City's Public Works Department that street and lane closures are not longer than 72 hours. To ensure that access to all properties along Carson Street are maintained, the Sheriff's Station, City's Transportation Division, and Fire Department would review the temporary street closure requests and ensure that properties remain accessible during special events. No permanent street closures would result from the Modified Project. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would involve the same types of pedestrian and roadway improvements as the Modified Project, including the potential to temporarily close Carson Street between Avalon Boulevard and Bonita Street/Civic Plaza Drive to host special events. To ensure that access to all properties along Carson Street are maintained, the Sheriff's Station, City's Transportation Division, and Fire Department would review the temporary street closure requests and ensure that properties remain accessible during special events. No permanent street closures would result from the Modified Project. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

The Project Site is located in the Downtown Core, which has a General Plan land use designation of Downtown Mixed Use (DMU). Additionally, the Project Site is within the Downtown Mixed Use zoning district (DMX).

**Zoning Code**. The Modified Project includes development standards requires new structures to have a maximum height limit of 120 feet at the Performing Arts Center Parcel, 85 feet at the Mixed-Use Housing Parcel, 200 feet at the New City Hall Parcel, and 240 feet at the Hotel/Entertainment Retail Parcel. These height limits are higher than those permitted by the Zoning Code for the DMX zoning district. The Modified Project provides other development standards that are also different from the existing Zoning Code for the DMX zoning district.

The uses and types of development proposed for the Modified Project are designed to enhance the character of the Project Site and integrate with the surrounding uses. The development standards associated with the Modified Project are designed to ensure that future development on the Project Site would be compatible with the surrounding uses. Although the Modified Project would permit taller structures than permitted by the existing DMX zoning district for the Project Site, Modified Project includes development standards that require building heights to be step back from the residential properties north of the Project Site. The maximum permitted building height would be 4 stories along the northern parcel line for the Mixed-Use Housing Parcel, 7 stories from the eastern parcel line and 4 stories from the northern parcel line at the New City Hall Parcel, and 4 stories within 100 feet from the northern parcel line at the Hotel/Entertainment Parcel. These proposed development standards along the parcel lines would be within the height limits associated with the DMX zoning district and would allow structures on the Project Site to transition in height and be sensitive to and compatible with the adjacent residential uses.

In accordance with Section 9217.2 of the City's Zoning Code, if the Modified Project is approved by the City, the design and development standards associated with the Modified Project would supersede the requirements of the City's Zoning Code for the Project Site, and the design and architecture of future structures on the Project Site would be required to be consistent with the development standards and design guidelines of the Modified Project.. Any issues that the Modified Project does not specifically address would be subject to the requirements of the City's Zoning Code. During the entitlement review process, the Modified Project, including its development standards and design guidelines, would be reviewed for its compatibility with the adjacent single-family residential uses, as well as the surrounding area. The Modified Project must be approved by the City prior to implementing the developments that were envisioned by the Modified Project. With approval, the Modified Project would not conflict with the City's Zoning Code.

**General Plan Update Guiding Principles.** The Modified Project is consistent with applicable guiding principles of the General Plan Update, including:

- Promote vibrant, safe, and walkable mixed-use districts and neighborhoods, and revitalized corridors.
- Support a diversified economy with a range of employment opportunities for all residents, a fiscally-sound local government, and investment in infrastructure.
- Encourage development of regional-scale destinations, as well as neighborhood-serving retail and amenities.
- Improve public health and sustainability.
- Promote development of a cohesive open space system.
- Enhance the public realm and promote quality design.

- Emphasize a diversity of transportation modes and choices.

The Modified Project would develop a mix of uses that complement each other, including retail/restaurants, offices, a hotel, a performing arts center, City Hall, and a community center. These uses would revitalize the Project Site, would serve residents in the surrounding area, as well as visitors from the region, and would provide a range of employment opportunities. The Modified Project includes development standards that promote quality design, including requirements that require building step backs to allow a transition in height from the surrounding low-rise residential buildings to the taller mid- and high-rise buildings on the Project Site. This transition in height would allow the proposed uses on the Project Site to be sensitive to and compatible with the surrounding uses.

The Modified Project would provide a network of pedestrian pathways on the Project Site, widen the northern sidewalk on Carson Street, enhanced the sidewalks on Carson Street with new landscaping and paving and/or art, provide new crosswalks at the Carson Street/Avalon Boulevard intersection, provide a mid-block crossing near the entry of the new City Hall building, and potentially install bus shelters at bus stops adjacent to and across the street from the Project Site. Publicly accessible open space areas that are connected by pedestrian pathways and a bus depot are proposed on the Project Site. These proposed changes would promote a vibrant, safe, and walkable development; promote a cohesive open space system that are connected by walking paths; enhance the public realm; and support the use of transit and pedestrian activities.

The Modified Project includes development standards for future development to incorporate sustainable features, such as the use of solar and ventilation techniques, the use of “green” building materials, and high energy efficiency exterior light fixtures, as well as orienting buildings for solar efficiency and incorporating sustainable stormwater facilities.

**General Plan Update Land Use Strategies.** The General Plan Update Land Use and Revitalization Element provides land use strategies to better integrate uses in different parts of the City and provides a better connection between employment and residential uses. The Land Use and Revitalization Element’s approach is to focus most new development in the Downtown Core, which has an existing General Plan land use designation of DMU. The Downtown Core would have the highest intensities, with landscaping, streetscape, pedestrian, and bicycle network improvements that complement proposed land uses in the Downtown Core. The Modified Project would be consistent with this strategy as it would increase development density on the Project Site through the provision of a mix of uses that would complement each other. The new landscaping, wider sidewalks along the north side of Carson Street, open space areas, and pedestrian pathways would complement the proposed uses by encouraging pedestrian activities.

The DMU General Plan land use designation for the Downtown Core is intended to promote a vibrant “Main Street” like ambience throughout the Downtown Core with mid-rise, mixed-use development and active commercial uses on the ground floor building frontages along Carson Street and Avalon Boulevard. Consistent with the General Plan DMU land use designation, the Modified Project would develop a mix of uses on the Project Site that include residential, civic, retail, restaurants, performing arts, and hotel uses. Active commercial uses that promote pedestrian activities would be encouraged on the ground level.

The Modified Project would permit new structures to be up to 10 stories tall at the Performing Arts Center, 8 stories at the Mixed-Use Housing Parcel, 15 stories at the New City Hall Parcel, and 22 stories at the Hotel/Entertainment Retail Parcel. Although the height limits at the New City Hall Parcel and Hotel/Entertainment Retail Parcel would be taller than designated for the DMU General Plan land use designation, the Modified Project would be consistent with the overall land use strategy for the DMU General Plan land use designation to promote a vibrant “Main Street” like

ambiance in the Downtown Core with active ground floor uses that are accessible to the general public and that contribute to a high level of pedestrian activity. Additionally, the Modified Project includes development standards that require building heights to be step back from the residential properties north of the Project Site. The maximum permitted height would be 4 stories along the northern parcel line for the Mixed-Use Housing Parcel, 7 stories from the eastern parcel line and 4 stories from the northern parcel line at the New City Hall Parcel, and 4 stories within 100 feet from the northern parcel line at the Hotel/Entertainment Parcel. These proposed development standards along the parcel lines would allow structures on the Project Site to transition in height and be sensitive to and compatible with the adjacent residential uses.

As explained in the General Plan Update Land Use and Revitalization Element, the building heights identified in the Land Use and Revitalization Element are preliminary range of typical building heights for the various land use designations. The allowable maximum building heights are established in the Zoning Code and may be higher or lower than what is illustrated in the General Plan Update. As mentioned above, the Modified Project, including its development standards and design guidelines, would be reviewed for its compatibility with the adjacent residential uses, as well as the surrounding area. If the Modified Project is approved by the City, the development intensity, including the maximum building height limits, and other development standards for the Modified Project would supersede the requirements of the City's Zoning Code for the Project Site, and the design and architecture of future structures on the Project Site would be required to be consistent with the development standards and design guidelines of the Modified Project.. Any issues that the Modified Project does not specifically address would be subject to the requirements of the City's Zoning Code. Therefore, the Modified Project would not conflict with the General Plan Update land use strategies in a manner that would cause a significant environmental impact.

**General Plan Update Policies.** The Modified Project would be consistent with the guiding policies and predominately consistent with the implementing policies of the General Plan Update. The Modified Project would provide a broad mix of uses that complement each other, provide employment opportunities, and support the City's economy. The proposed mix of uses would attract visitors on a local and regional scale. The Modified Project includes improvements that support an environment that is pedestrian and transit friendly, such as pedestrian pathways that connect the proposed uses and publicly accessible open space areas to each other and to the adjacent streets, a wide sidewalk on Carson Street, new crosswalks at the Avalon Boulevard/Carson Street intersection, a new midblock crossing on Carson Street, potential shelters at nearby bus stops, and a potential bus depot on the Mixed-Use Housing Parcel. Active ground level uses, such as retail and restaurants, would be placed in locations that would be easily accessible to pedestrians. A combination of subterranean and podium parking would be provided to accommodate the proposed mix of uses on the Project Site and would be situated away from Avalon Boulevard and Carson Street.

Although the Modified Project would provide taller structures than identified in the General Plan Update for the DMU General Plan land use designation, which is not consistent with General Plan Implementing Policies LUR-P-32 pertaining to residential density and LUR-P-34 pertaining to height limits, the taller structures are intended to enhance the image of the Project Site as a regional destination that is distinct in character and style from other areas of the City. The Modified Project would foster the City's sense of place and arrival through the proposed building design along Carson Street and the proposed improvements along Carson Street. The higher density development combined with the proposed mix of uses, improvements along the Carson Street right-of-way, and open space areas that promote communal uses, would also support the vision of Downtown Core as an energetic commercial, cultural, and residential center. Additionally, the Modified Project provides development standards that require the project to transition in height with lower building heights that are sensitive to and compatible with the adjacent residential neighborhood to the north. The maximum permitted building height would be located away from

this residential neighborhood. Additionally, the taller structures that would be permitted by the Modified Project would better meet the guiding principles and guiding policies of the General Plan Update, including LUR-G-3, LUR-G-9, CCD-G-1, CCD-G-3, and ED-G-6. As discussed throughout this Addendum, the Modified Project would not cause a significant environmental impact due to a conflict with the General Plan Update.

**2006 Carson Street Mixed-Use District Master Plan.** The 2006 Carson Street Mixed-Use District Master Plan, adopted in June 2006, focuses on a 1.75-mile section of Carson Street in the City between I-405 and I-110. The Master Plan is intended for use by development within the boundary of the Mixed-Use Overlay District as defined by the Carson General Plan.

The following goals of the Master Plan are applicable to the Modified Project:

- Create a beautiful, vibrant, "main street" that reflects the community's vision and embodies the identity of the City
- Create a distinctive mixed-use character throughout Carson Street.
- Create a livable, pedestrian friendly downtown district near the civic core.
- Create distinctive gateways on either end of Carson Street at the freeway intersection.
- Capitalize on the cultural diversity of Carson as a vehicle for restaurants and other retail uses.
- Direct revitalization efforts to support desirable and viable commercial development.
- Promote a high standard of amenity in public places.

The Modified Project would be consistent with the applicable goals of the 2006 Carson Street Mixed-Use District Master Plan. The Modified Project would provide a mix of uses with open space areas that are connected to each other and to the adjacent streets by a network of pedestrian pathways. The Carson Street streetscape would be improved with a wider sidewalk on the north side of the street, new paving, new street trees that alternate between large shade trees and palm trees, new crosswalks at the Avalon Boulevard/Carson Street intersection, and a new midblock pedestrian crossing. Pedestrian amenities would be provided in the publicly accessible open space areas on the Project Site and on Carson Street, such as seating areas, outdoor dining, and shelters at nearby bus stops The proposed improvements on and adjacent to the Project Site would create a distinctive, livable, pedestrian-friendly, mixed-use character that reflects the City's vision of the Project Site as the "heart" of the City.

The Project Site is approximately 920 feet west of I-405. The Modified Project would construct a new 15-story tall City Hall building that fronts Carson Street, which would be taller than other mid-rise structures along the street. The taller building, in combination with the proposed new streetscape along Carson Street, would stand out against the surrounding uses, creating a distinctive gateway to the City just west of I-405.

The Modified Project includes a mix of retail, restaurant, office, performing arts, civic, hotel, community, and residential uses. The broad range of uses would support and supplement each other to provide a viable development. Additionally, retail and restaurant spaces would be located on the ground floor to foster pedestrian activities and would provide business opportunities for various cultures.

**Southern California Association of Governments Connect SoCal 2024.** Carson is a member of the SCAG Regional Council, the decision-making body of the SCAG Joint Powers Authority under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization and, under state law, as a Regional Transportation Planning Agency and a Council of Governments. The SCAG RTP/SCS, Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies

established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. Connect SoCal is a planning document for the region, allowing project sponsors to qualify for federal funding. In addition, Connect SoCal identifies a combination of transportation and land use strategies that help the region achieve state GHG emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, and support our vital goods movement industry.

Adopted in April 4, 2024, Connect SoCal 2024 is the region's most recently adopted RTP/SCS. Connect SoCal 2024 envisions a region that is characterized by compact and mixed-use development that prioritizes walkability and livable neighborhoods with ample green spaces, public amenities, and affordable housing options. The Modified Project would be consistent with Connect SoCal 2024 as it would provide a broad mix of uses that complement each other and open space areas that are connected by a network of pedestrian pathways. New landscaping and pedestrian amenities would be provided on and off the Project Site, and the Carson Street streetscape would be improved to create a pedestrian-friendly environment. The Modified Project's strategies for mixed-use development allow multiple land uses to work together to reduce vehicle trip lengths.

Connect SoCal is updated every four years and it is anticipated that the City will work with SCAG to update Connect SoCal so that the Modified Project would maintain consistency with this regional document. CARB's 2016 Mobile Source Strategy recognizes that coordinated regional planning can improve California's land use patterns and transportation policy in a way that reduces transportation related emissions by reducing growth in vehicle miles travel (VMT).

***Summary***

The Modified Project would be consistent with the SCAG Connect SoCal, the City's General Plan Update guiding principles, the City's General Plan Update guiding policies, and the 2006 Carson Street Mixed-Use District Master Plan. Although the Modified Project would result in structures that are taller than identified for the DMX zoning district and the land use strategy for the DMU General Plan land use designation, and would also not be consistent with General Plan Implementation Policies LUR-P-32 and LUR-P-34 due to the Modified Project's proposed height limits and residential density, the Modified Project would not cause a significant environmental impact due to these conflicts. The Modified Project would be reviewed by the Planning Commission and City Council as part of the discretionary review process for the Modified Project. The regulatory procedures provide the City with opportunities to incorporate additional conditions to ensure that the Modified Project would result in developments that are sensitive to and would be compatible with the surrounding use, as well as improve the character and condition of the Project Site. With approval of the requested discretionary actions, the Modified Project would be consistent with the City's General Plan and Zoning Code. Additionally, the taller structures and higher density development would better meet the guiding principles and guiding policies of the General Plan Update, including LUR-G-3, LUR-G-9, CCD-G-1, CCD-G-3, and ED-G-6. Therefore, the Modified Project would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would result in a broad range of uses that include retail, restaurant, office, civic, performing arts, residential, community, and entertainment uses as the Modified Project. Development standards, including development density and building height limits, would be the same as the Modified Project. As with the Modified Project, the Entertainment Retail Option would be consistent with SCAG's Connect SoCal, the City's General Plan Update guiding

principles, the City's General Plan Update guiding policies, and the 2006 Carson Street Mixed-Use District Master Plan.

The Entertainment Retail Option would result in structures that are taller than identified for the DMX zoning district and the land use strategy for the DMU General Plan land use designation. The Entertainment Retail Option also would not be consistent with General Plan Implementation Policies LUR-P-32 and LUR-P-34 due to its proposed height limits and residential density. However, the Modified Project would not cause a significant environmental impact due to these conflicts. Additionally, the Entertainment Retail Option would better meet the guiding principles and guiding policies of the General Plan Update, including LUR-G-3, LUR-G-9, CCD-G-1, CCD-G-3, and ED-G-6. Additionally, the Entertainment Retail Option would be reviewed by the Planning Commission and City Council as part of its discretionary review process. The regulatory procedures provide the City with opportunities to incorporate additional conditions to ensure that the Entertainment Retail Option would result in developments that are sensitive to and would be compatible with the surrounding use, as well as improve the character and condition of the Project Site. With approval of the requested discretionary actions, the Entertainment Retail Option would be consistent with the City's General Plan and Zoning Code. Therefore, the Entertainment Retail Option would not cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.11.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.11.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.11.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.11.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.12 MINERAL RESOURCES

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **MINERAL RESOURCES**. Would the project: | | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | No Impact | No | No | No | No |
| b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | No Impact | No | No | No | No |

## 3.12.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?*

As discussed in the Certified EIR, portions of the City are located within the Dominguez and Wilmington Oil Fields. As a result, there are large areas of the City devoted to the management and production of oil and petroleum products. The General Plan Update would focus development in the City's Central Core and would not otherwise affect heavy industrial areas in the City which are dedicated to oil and petroleum production. The Certified EIR concluded that no impacts would occur.

### *(b) Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on local general plan, specific plan or other land use plan?*

As discussed in the Certified EIR, there are large areas of the City devoted to the management and production of oil and petroleum products. However, implementation of the General Plan Update would not affect areas which are dedicated to oil and petroleum production. The Certified EIR concluded that no impacts would occur.

**General Plan Update Policies that Address Mineral Resources**

None.

**Mitigation Measures**

None required.

### 3.12.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?***

The Project Site is not located in an oil field, and no oil extraction and/or quarry activities have historically occurred on or are presently conducted on the Project Site.[32] The Modified Project would be developed in the Downtown Core and would not otherwise affect areas in the City which are dedicated to oil and petroleum production. The Modified Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project result in the loss of availability of a locally important mineral resource recovery site delineated on local general plan, specific plan or other land use plan?***

The Project Site is not located in an area with oil production. It is located within Mineral Resource Zone 1 (MRZ-1), which is an area where no significant mineral deposits are present.[33] The Modified Project does not involve activities that would result in the loss of a locally important mineral resource recovery site delineated in the General Plan Update, a specific plan, or other land use plan. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***Entertainment Retail Option***

The Entertainment Retail Option would occur on the same site as the Modified Project. As with the Modified Project, the Entertainment Retail Option would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state and would not result in the loss of a locally important mineral resource recovery site delineated in the General Plan Update, a specific plan, or other land use plan. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.12.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.12.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.12.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

[32]California Department of Conservation, *Well Finder*, https://maps.conservation.ca.gov/oilgas/#webmaps, accessed March 2025.

[33]California Department of Conservation, *Generalized Mineral Land Classification Map of Los Angeles County – South Half*, 1994.

### 3.12.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.13 NOISE

| Issues (and supporting Information Sources) | Impact Determination in the Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impact or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **NOISE**: Would the project result in: | | | | | |
| (a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | Less Than Significant | No | No | No | No |
| (b) Generation of excessive ground-borne vibration or ground-borne noise levels? | Less Than Significant | No | No | No | No |
| (c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels? | No Impact | No | No | No | No |

## 3.13.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?*

### *Construction*

As discussed in the Certified EIR, construction of future development under the General Plan Update would require the use of heavy equipment during the demolition, grading, excavation, and other construction activities within the Planning Area. During each stage of development for any given construction project, a different mix of equipment would be used. As such, construction activity noise levels would fluctuate depending on the particular type, number, and duration of use of the various pieces of construction equipment. Individual pieces of construction equipment expected to be used during construction could produce maximum noise levels of 75 decibels (dBA) to 101 dBA $L_{max}$ at a reference distance of 50 feet from the noise source. These maximum noise levels would occur when equipment is operating at full power.

The exact locations of future projects and construction that would be implemented under the General Plan Update are not known at the time the Certified EIR was prepared, though it is assumed that some of the activities would take place in close proximity to noise sensitive receptors given that the Planning Area includes a wide range of receptors. The severity of construction-related noise impacts depends on the proximity of construction activities to sensitive receptors, the presence of intervening barriers, the number and types of equipment used, and the duration of the activity. While the details of these factors are not available for future projects under the General Plan Update, it is assumed that individual projects would be implemented in compliance with the City standards. Future development under the General Plan Update would be required to comply

with the restrictions of the CMC. In addition, future development under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on specifics of each individual project. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally result in a potentially significant impact and require mitigation. Therefore, the Certified EIR concluded the impact from construction noise would be less than significant.

**Traffic.** As discussed in the Certified EIR, future development under the General Plan Update would generate traffic that would increase noise levels along existing and future roadways. The Federal Highway Administration (FHWA) Traffic Noise Model was used to evaluate future traffic-related noise conditions in the City and SOI at the study intersections. The model calculates the average noise level at specific locations based on traffic volumes, average speeds, and site environmental conditions. Traffic noise along the analyzed roadway segments would not be discernably different when existing noise levels are compared to future roadway noise levels with implementation of the General Plan Update. The maximum increase of 2.5 dBA would be along Figueroa Street between Victoria Street and Del Amo Boulevard. A 3 dBA increase in noise levels is considered barely perceivable by the human ear. Therefore, the impact from traffic noise would be less than significant.

**Railway.** As discussed in the Certified EIR, there are railroad tracks along the eastern portion of the City, generally following Alameda Street and are used primarily for the transport of cargo containers from the Ports of Los Angeles and Long Beach to inland warehouses or to out of state destinations. The residential neighborhood of Lincoln Village in the southeastern corner of the City is impacted by the train noise along these railroad tracks. Freight trains usually generate higher noise levels than passenger trains, but do not operate on a fixed schedule. New or renovated noise-sensitive uses in the Lincoln Village area would be required to evaluate potential train noise level at the site. Mitigation measures designed to meet the exterior and/or interior noise standards shall be identified and implemented. Therefore, the Certified EIR concluded that the impact from railway noise would be less than significant.

**Stationary Noise Sources.** As discussed in the Certified EIR, future development under the General Plan Update could expose existing and new sensitive receptors to stationary noise sources, such as rooftop heating, ventilation, and air conditioning (HVAC) units. In addition, growth anticipated under the General Plan Update could expose existing and new sensitive receptors to stationary noise sources associated with industrial uses. Any new development under the General Plan Update would be subject to the CMC Noise Control Ordinance and to the General Plan Update policies aimed at reducing noise levels from adjacent properties. The Certified EIR concluded that through compliance with the CMC Noise Control Ordinance and General Plan Update policies, the impact from stationary noise would be less than significant.

### *(b) Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?*

**Construction – Human Annoyance.** As discussed in the Certified EIR, the use of large bulldozers and loaded trucks for construction would generate the highest groundborne vibration levels on a typical construction site. Large bulldozers and loaded trucks would generate 87 vibration velocity decibels (VdB) and 86 Vdb, respectively, at a reference distance of 25 feet. These levels would exceed the Federal Transit Administration's (FTA) 78 VdB threshold at the nearest noise-sensitive receiver locations during daytime hours or the FTA's 84 VdB threshold for annoyance of occupants in residential buildings.

The exact locations of future projects and construction that would be implemented under the General Plan Update are not known at this time. The severity of construction-related vibration impacts depends on the proximity of construction activities to adjacent structures and the types of equipment used. While the details of these factors are not available for future projects under the General Plan Update, it is assumed that individual projects would be implemented in compliance with applicable standards. In addition, future development under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on specifics of each individual project. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally be considered significant and require mitigation. Therefore, the impact of vibration with respect to human annoyance would be less than significant.

**Construction – Building Damage.** As discussed in the Certified EIR, the use of large bulldozers and loaded trucks for construction would generate the highest groundborne vibration levels on a typical construction site. According to the FTA, large bulldozers and loaded trucks would generate 0.089 inches per second (in/sec) peak particle volume (PPV) and 0.076 in/sec PPV, respectively, at a reference distance of 25 feet. Construction activities, such as the use of a large bulldozer and loaded trucks, would be required to not operate within 8 to 21 feet of structures depending on the material of the structures (e.g., reinforced or engineered concrete, steel, timber, and masonry).

The exact locations of future projects and construction that would be implemented under the General Plan Update are not known at this time. The severity of construction-related vibration impacts depends on the proximity of construction activities to adjacent structures and the types of equipment used. While the details of these factors are not available for future projects under the General Plan Update, it is assumed that individual projects would be implemented in compliance with applicable standards. In addition, future development under the General Plan Update would be required to conduct their own CEQA analysis and would determine significance based on specifics of each individual projects. Through each project's individual environmental review process, potential impacts would be identified and compared against relevant thresholds. Individual projects that exceed the thresholds would normally be considered significant and require mitigation. Therefore, the Certified EIR concluded that the impact of vibration to buildings during construction would be less than significant.

**Traffic.** As discussed in the Certified EIR, Vehicular traffic would generate groundborne vibration and under the General Plan Update, more land development would leave to more traffic volume. However, the vibration from vehicles is temporary and intermittent and generates up to 61 Vdb or 0.005 in/sec PPV. The vibration levels from traffic would be well below the thresholds for structural damage. Therefore, the Certified EIR concluded that the impact to sensitive receptors and buildings from vibration generated by traffic would be less than significant.

**Railway.** As discussed in the Certified EIR, the operation of freight trains along the Alameda corridor currently generates vibration. The General Plan Update would not change the levels of vibration along this line. All future development in the vicinity of the Alameda corridor would be subject to the noise screening distances found in the Federal Railroad Administration (FRA) High-Speed Ground Transportation Noise and Vibration Manual. The screening distance for railroad corridor rail mainline is 300 feet for mechanical/structural sources and 700 feet for aerodynamic sources with steel-wheeled trains and 200 feet for mechanical/structural sources and 300 feet for aerodynamic sources with intervening buildings. At these distances, vibration levels would attenuate rapidly, and any new developments would not be affected. Therefore, the Certified EIR concluded that the impact to sensitive receptors and buildings from vibration generated by rail traffic would be less than significant.

***(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?***

As discussed in the Certified EIR, the City is not located within the vicinity of a private airstrip or airport land use plan, or where such a plan has not been adopted, is not located within two miles of a public airport or public use airport. The Compton Airport is located approximately one-half mile to the northwest of the City while the Long Beach International and Los Angles International airports are located approximately 13 miles and 12.7 miles to the southeast and the northwest of the City, respectively. The City is affected by the overflight of airplanes from these airports but is not within the 60 dBA CNEL of any of these airports. Therefore, the Certified EIR concluded that implementation of the General Plan Update would not expose people residing or working in the project area to excessive noise levels, and thus this impact would be less than significant.

**General Plan Policies**

***Noise***

*Guiding Policies*

NO-G-1 Maintain healthy sound environments and protect noise-sensitive uses from excessive noise exposure.

NO-G-2 Continue efforts to incorporate noise considerations into land use planning decisions and guide the location and design of noise-generating facilities, such as transportation and industrial facilities, to minimize the effects of noise on adjacent land uses.

NO-G-3 Seek to reduce noise impacts along major freeways, roadways, and truck routes to improve the health of nearby inhabitants.

*Implementing Policies*

NO-P-1 Use the noise and land use compatibility matrix (Table 9-1) and Future Noise Contours map (Figure 3.11-4) as criteria to determine acceptability of a land use. Seek to limit new noise-sensitive uses—including schools, hospitals, places of worship, and homes—where noise levels exceed “Normally Acceptable” or “Conditionally Acceptable” levels if alternative locations are available for the uses in the City, or impose appropriate mitigation measures to bring noise levels down to acceptable levels. NO-P-2 Require applicants for projects with noise exposure levels that exceed the standards listed in Table 9-1 to provide a technical analysis by a professional acoustical engineer and incorporate noise-attenuating features into site planning and architecture. With mitigation, development should meet the allowable outdoor and indoor noise exposure standards in Table 9-2, or California Building Code, whichever is stricter. When a building’s openings to the exterior are required to be closed to meet the interior noise standard, mechanical ventilation should be provided.

NO-P-3 Where site conditions permit, require noise buffering consistent with Policy NOP-4 for all noise generators producing noise levels greater than the maximum allowed CNEL listed in Table 9-3, especially those located near noise-sensitive development.

NO-P-4 For aesthetic reasons, discourage the use of sound walls for noise mitigation; rather, encourage the use of project design techniques such as increasing the distance between the noise source and the noise sensitive receiver, natural berms, and use non-noise sensitive structures (e.g., a garage) to shield noise sensitive areas. If a

sound wall is determined necessary to mitigate noise, discourage exclusive use of walls in excess of six feet in height and encourage use of natural barriers such as site topography or constructed earthen berms. When walls are determined to be the only feasible solution to noise mitigation, then sound walls shall be designed to limit aesthetic impacts.

NO-P-5 Require control of new developments deemed to be noise generators through site design, building design, landscaping, hours of operation, and other techniques for such that noise at site edges do not exceed performance-based standards outlined in Table 9-3.

NO-P-6 Work with Los Angeles Metropolitan Transportation Authority (Metro) and other service providers to ensure that transit services through the City result in minimal impacts from noise and ground-borne vibration.

NO-P-7 Seek to mitigate noise impacts from loud noise generating uses—including industrial uses, construction activity, goods movement by train and trucking, and along freeways, major corridors, and truck routes—to surrounding nonindustrial uses.

NO-P-8 Review the City of Carson Noise Ordinance for adequacy to meet noise requirements set forth in the General Plan and amend as needed to address future community needs and development patterns.

***Land Use and Revitalization***

*Guiding Policies*

LUR-G-10 Provide lands to accommodate a wide range of light industrial uses including research and development, manufacturing, agricultural processing, and logistics near transportation corridors in areas where low- to moderate intensity operations would be sufficiently buffered.

LUR-G-13 Ensure adequate buffers and transitions between industrial and residential land uses as sites are developed or redeveloped.

LUR-G-14 Ensure that future industrial development is in harmony to the extent possible with adjacent residential areas. To this end, new logistics buildings must have easy access to freeways and the Alameda corridor to prevent trucks passing on truck routes next to residential areas.

*Implementing Policies*

LUR-P-17 Ensure that new industrial uses in the Business Mixed-Use designation minimize adverse off site air quality, noise, or glare impacts incompatible with permitted residential.

LUR-P-19 Provide lands to accommodate a wide range of light industrial uses including research and development, manufacturing, and agricultural processing near transportation corridors in areas where low- to moderate intensity operations would be sufficiently buffered. Logistics and other heavy trucking uses shall be limited to industrial areas that provide direct access to freeways and the Alameda corridor.

LUR-P-22 When industrial land directly adjacent to existing or permitted residential, parks, schools or other sensitive uses is developed or intensified, require a buffer of natural vegetation, open space, berms, and trees between the new residential development

and industrial land. Other operation factors, including hours of operation, traffic, noise, and air quality impacts, shall be assessed and mitigated at time of project review.

LUR-P-24 Promote the development of sites designated as Business Residential Mixed Use (BRMU) with a vibrant mix of business and residential uses that include:

- For the Shell site, require at least a minimum of 25 acres of open space, 18 of which as a centralized park or open space and seven acres along the western border of the property as a Greenway Corridor/buffer. Exact locations and acreages should be specified during project planning.
- For the Shell site, require at least a minimum nine acres of General Commercial at the south-west corner of Del Amo Boulevard and Wilmington Avenue or at a centralized location. Other commercial uses are encouraged throughout the site as mixed-use development.
- Encourage residential development with a range of housing types, and technology, research and development, and office uses if determined to be suitable from an environmental perspective.
- Require development to be connected to the surroundings, with through streets, and walkable urban design patterns. See additional policies in Chapter 4: Community Character, Identity, and Design Element.
- When housing is proposed adjacent to industrial uses, require the development of a cohesive master or specific plan to include surrounding property owners to ensure compatibility. The Shell site is required to have a similar plan to outline long term growth of the site.

### *Circulation*

*Guiding Policies*

CIR-G-3 Manage the transportation network to minimize roadway congestion, while balancing traffic Level of Service (LOS) objectives with promoting reduction in vehicle miles traveled and considerations of community character and design.

CIR-G-4 Encourage the development of a multimodal freight transportation system that balances the need for effective and efficient transportation of goods with the health and wellbeing of the community. Implementing Policies

CIR-P-10 Direct commuter traffic to move through the City primarily on arterial streets, and on collector streets as appropriate. Consider traffic calming strategies.

CIR-P-12 Install traffic calming devices as needed and appropriate in existing neighborhoods.

CIR-P-28 Focus truck traffic onto appropriate arterial corridors in the City by clearly marking truck routes and posting appropriate signage to provide for the effective transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses. While the City has identified truck routes (Fig 3-8), the designation of truck routes does not prevent trucks from using other roads or streets to make deliveries to individual addresses. Seeking community input around the issue and general observation of traffic patterns as online shopping and associated deliveries increase in the future will help in developing strategies to reduce use of non-designated corridors and limit disruption and potentially regulate truck movement.

CIR-P-29 Retain and strengthen ordinances restricting trucks from residential neighborhoods, using strategies such as time-of-day restrictions.

CIR-P-30 Conduct a study reviewing truck routes that are designated adjacent to residential neighborhoods. The City of Carson will explore where truck routes are redundant or unnecessary and could be removed without negative impacts to other residential neighborhoods. Segments of truck routes adjacent to residential neighborhoods are shown in Figure 3-9.

**Mitigation Measures**

None required.

### 3.13.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project result in the generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?***

**Existing Noise Levels.** The City has identified residences, public and private school/preschool classrooms, churches, hospitals and elderly care facilities as noise sensitive receptors. Sensitive receptors nearest to the Project Site include:

- Single-family residences along Desford Street located to the north;
- Single- and multi-family residences west of Avalon Boulevard;
- Single- and multi-family residences south of Carson Street;
- Golden Wings Academy located to the south; and
- Carnegie Middle School located to the south.

To characterize the existing noise environment around the Project Site, short-term noise measurements were taken using a SoundPro DL Sound Level Meter on Tuesday, October 7, 2025, from 10:30 a.m. to 11:30 a.m. and on Wednesday, October 15, 2025, from 10:00 a.m. to 11:00 a.m. Noise levels in the surrounding area ranged from 55.3 to 74.3 dBA $L_{eq}$. Roadway noise was the most significant source of noise in the area. Monitoring locations and existing noise levels are shown in **Table 3-18**.

**TABLE 3-18: EXISTING AMBIENT NOISE LEVELS**

| Site Number | Noise Monitoring Location | Sound Level (dBA, $L_{eq}$) | Sound Level (dBA, $L_{50}$) |
|---|---|---|---|
| 1 | Bel-Aire Park (Avalon Blvd/Desford St Intersection) | 70.3 | 65.1 |
| 2 | Residence (21418 Garston Ave) | 55.3 | 51.5 |
| 3 | Mixed-Use Residential (Avalon Blvd/Carson St Intersection) | 74.3 | 67.4 |
| 4 | Park Avalon Mobile Estates (750 Carson St) | 71.7 | 67.7 |
| 5 | Carson Event Center Parking Lot | 67.5 | 60.9 |
| 6 | Carnegie Middle School | 62.9 | 57.2 |

**Note:** Noise monitoring reports can be found in **Appendix B**.
**SOURCE**: TAHA, 2025.

**Applicable Construction Noise Regulations/Standards.** The City has established noise standards to control unnecessary, excessive and annoying noise. The standards are codified in Chapter 5 of the CMC (Noise Control Ordinance). As noted in Section 5550 of the CMC, the City has adopted the Los Angeles County Noise Control Ordinance with amendments that are described in Section 5502 (Amendments to Noise Control Ordinance). Section 12.08.440 of the Los Angeles County Noise Control Ordinance (Construction Noise) states that operating or causing the operation of any tools or equipment used in construction, drilling, repair, alteration or demolition work between weekday hours of 7:00 p.m. and 7:00 a.m., or at any time on Sundays or holidays, such that the sound therefrom creates a noise disturbance across a residential or commercial real-property line, except for emergency work of public service utilities or by variance issued by the health officer is prohibited. CMC Section 5502(c) provides exterior noise standards that regulate construction noise near residential uses. Noise standards for non-scheduled, intermittent, short-term operations (less than 20 days), as well as standards for repetitively scheduled and relatively long-term construction operations (periods of 21 days or more) of equipment are summarized in **Table 3-19**.

**TABLE 3-19: CMC MAXIMUM CONSTRUCTION NOISE LEVELS**

| Construction Time | | Maximum Allowed Noise Level (dBA) | |
|---|---|---|---|
| | | Single Family Residential | Multi-Family Residential |
| Maximum noise levels for non-scheduled, intermittent, short-term operation of 20 days or less for construction equipment | Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m. | 75 | 80 |
| | Daily, except 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays | 60 | 64 |
| Maximum noise level for repetitively scheduled and relatively long-term operation of 21 days or more for construction equipment | Daily, except Sundays and legal holidays, 7:00 a.m. to 8:00 p.m. | 65 | 70 |
| | Daily, except 8:00 p.m. to 7:00 a.m. and all day Sunday and legal holidays | 55 | 60 |

**SOURCE**: City of Carson, *Carson Municipal Code, Section 5502(c) Amendments to Noise Control Ordinance*, September 21, 2021.

For the purposes of this noise analysis, the daytime noise standard of 65 dBA is used to determine if construction associated with the Modified Project would result in significant impacts at sensitive receptors during the daytime. Since nighttime construction for the Modified Project is expected to occur for less than 20 days, the nighttime noise standard of 60 dBA was used to determine if construction associated with the Modified Project would result in significant noise impacts during the nighttime.

**Construction Activities.** Construction activity would result in temporary increases in ambient noise levels in the area surrounding the Project Site on an intermittent basis. Noise levels would fluctuate depending on the construction phase, equipment type and duration of use, distance between the noise source and receptor, and presence or absence of noise attenuation barriers. Typical noise levels from various types of equipment that may be used during each construction phase are listed in **Table 3-20**.

| TABLE 3-20: CONSTRUCTION EQUIPMENT NOISE LEVEL RANGES | |
|---|---|
| **Construction Equipment** | **Noise Level at 50 feet (dBA, $L_{eq(8\text{-}hour)}$)** |
| Auger Drill Rig | 72.4 |
| Backhoe | 68.6 |
| Compactor (ground) | 71.2 |
| Compressor (air) | 73.7 |
| Concrete Mixer Truck | 69.8 |
| Concrete Pump Truck | 69.4 |
| Concrete Saw | 82.6 |
| Crane | 67.6 |
| Dozer | 72.7 |
| Excavator | 71.7 |
| Generator | 77.6 |
| Gradall | 74.4 |
| Grader | 76.0 |
| Man Lift | 62.7 |
| Paver | 69.2 |
| Roller | 68.0 |
| Welder/torch | 70.0 |
| **SOURCE:** FHWA, *Roadway Construction Noise Model, Version 1.1*, 2008. | |

Construction activities typically require the use of numerous pieces of noise-generating equipment. In addition, truck trips would be required to remove excavated materials and import fill material. The noise levels shown in **Table 3-21** take into account the likelihood that multiple pieces of construction equipment would be operating simultaneously, the anticipated usage percentage for a typical day and the typical overall noise levels that would be expected for each phase of construction. When considered as an entire process with multiple pieces of equipment, demolition and clearing would generate the loudest noise level of approximately 85.2 dBA $L_{eq\ (8\text{-}hour)}$ at 50 feet.[34] It is possible that nighttime construction may be required for some activities, such as continuous concrete mat pours. Nighttime activities would typically be limited to only the equipment required for concrete mat pours or similar activities and would be less intense than daytime activities. The noise level during nighttime construction activities is estimated to be approximately 78.6 dBA, $L_{eq\ (8\text{-}hour)}$.

| TABLE 3-21: CONSTRUCTION PHASE NOISE LEVELS | |
|---|---|
| **Construction Phase** | **Noise Level At 50 Feet (dBA, $L_{eq(8\text{-}hour)}$)** |
| Demolition and Clearing | 85.2 |
| Site Preparation | 81.4 |
| Grading | 82.6 |
| Building Construction | 82.7 |
| Architectural Coating | 79.2 |
| Paving | 81.6 |
| Nighttime Construction | 78.6 |
| **SOURCE**: FHWA, *Roadway Construction Noise Model, Version 1.1,* 2008. | |

[34] $L_{eq}$ is is the average noise level on an energy basis for any specific time period.

The Modified Project would be constructed in a manner typical of urban infill projects and would not require unusually noisy activities such as pile driving. **Table 3-22** presents the estimated noise levels at the sensitive receptors nearest to the Project Site. The distances to sensitive receptors are based on the typical area of operation for construction equipment, which is near the center of the Project Site. The most noise-intensive construction activities would occur during the early phases of construction (e.g., site preparation, grading and structural framing). The majority of the latter phases of construction would occur within the newly constructed building and would result in lower noise levels than exterior construction. In some cases, existing noise levels already exceed the daytime construction noise standard. In these cases, the existing noise level has been used as the daytime construction noise standard.

**TABLE 3-22: UNMITIGATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS**

| Sensitive Receptors | Distance to Construction (Feet) /a/ | Existing Ambient Noise Level (dBA, $L_{eq}$) | Daytime Construction Noise Level at Sensitive Receptor (dBA, $L_{eq(8\text{-hour})}$) | Exceed Daytime 65-dBA Standard or Existing if Higher? | Nighttime Construction Noise Level at Sensitive Receptor (dBA, $L_{eq(8\text{-hour})}$) | Exceed Nighttime 60-dBA Standard? |
|---|---|---|---|---|---|---|
| Single-family residences to the north along Desford St | 100 | 55.3 | 79.1 | Yes | 72.6 | Yes |
| Single-family residences north of Desford St | 280 | 55.3 | 65.6 | Yes | 59.1 | No |
| Single- and multi-family residences to the west along Avalon Blvd | 190 | 70.3 | 73.5 | Yes | 67.0 | Yes |
| Single- and multi-family residences to the south along Carson St | 200 | 71.7 | 73.1 | Yes | 66.6 | Yes |
| Golden Wings Academy to the South | 300 | 71.7 | 69.5 | No | n/a | n/a |
| Carnegie Middle School to the South | 350 | 71.7 | 68.3 | No | n/a | n/a |

**Note:** Noise calculations can be found in **Appendix D**.
/a/ Distance is to the nearest central area of construction activity where equipment would typically be operating.
n/a = not applicable as schools do not have nighttime classes or operations.
**SOURCE:** TAHA, 2025.

As shown in **Table 3-22**, the daytime construction noise standard of 65 dBA and nighttime construction noise standard of 60 dBA would be exceeded at four sensitive receptor locations and, thus, mitigation measures would be required to reduce construction noise levels to below the City's noise standards. Mitigation measures include the provision of a public liaison who would be responsible for addressing public concerns regarding excessive construction noise (**Mitigation Measure NOI-1**); monitoring construction noise levels at nearby schools to determine if additional measures need to be implemented to reduce construction noise during school hours (**Mitigation Measure NOI-2**); and the provision of noise barriers that are capable of reducing construction noise

levels by at least 15 dBA (**Mitigation Measure NOI-3**). As shown in **Table 3-23** implementation of **Mitigation Measures NOI-1** through **NOI-3** would reduce construction noise to less than significant levels. With implementation of these mitigation measures, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-23: MITIGATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS**

| Sensitive Receptors | Distance to Construction (Feet) /a/ | Existing Ambient Noise Level (dBA, $L_{eq}$) | Daytime Construction Noise Level at Sensitive Receptor (dBA, $L_{eq(8\text{-hour})}$) /b/ | Exceed Daytime 65-dBA Standard or Existing if Higher? | Nighttime Construction Noise Level at Sensitive Receptor (dBA, $L_{eq(8\text{-hour})}$) /b/ | Exceed Nighttime 60-dBA Standard? |
|---|---|---|---|---|---|---|
| Single-family residences to the north along Desford St | 100 | 55.3 | 64.1 | No | 72.6 | No |
| Single-family residences north of Desford St | 280 | 55.3 | 50.6 | No | 59.1 | No |
| Single- and multi-family residences to the west along Avalon Blvd | 190 | 70.3 | 58.5 | No | 67.0 | No |
| Single- and multi-family residences to the south along Carson St | 200 | 71.7 | 58.1 | No | 66.6 | No |
| Golden Wings Academy to the South | 300 | 71.7 | 54.5 | No | n/a | n/a |
| Carnegie Middle School to the South | 350 | 71.7 | 57.2 | No | n/a | n/a |

**Note:** Noise calculations can be found in **Appendix D**.
/a/ Distance is to the nearest central area of construction activity where equipment would typically be operating.
/b/ Mitigation Measure **N-3** would require temporary noise barriers, which would provide 15 dBA of noise reduction.
n/a = not applicable as schools do not have nighttime classes or operations.
**SOURCE:** TAHA, 2025.

**Applicable Operational Noise Regulations/Standards.** As previously mentioned, the City has adopted the Los Angeles County Noise Control Ordinance with amendments that are described in Section 5502 (Amendments to Noise Control Ordinance). Los Angeles County Noise Control Ordinance Section 12.08.390 (Exterior Noise Standards — Citations for Violations Authorized When) and Section 12.08.400 (Interior Noise Standards) establish exterior and interior noise standards, respectively, to regulate intrusive operational noises within specific land use zones. **Table 3-24** shows the exterior noise standards and **Table 3-25** shows the interior noise standards from these sections of the Los Angeles County Noise Control Ordinance.

**TABLE 3-24: LOS ANGELES COUNTY EXTERIOR NOISE STANDARDS**

| Noise Zone | Land Use | Time | $L_{50}$ Exceed 30 min/hour | $L_{25}$ Exceed 15 min/hour | $L_{8.3}$ Exceed 5 min/hour | $L_{1.7}$ Exceed 1 min/hour | $L_0$ Exceed at any time |
|---|---|---|---|---|---|---|---|
| I | Noise Sensitive | Anytime | 45 | 50 | 65 | 60 | 65 |
| II | Residential | 10:00 p.m. to 7:00 a.m. | 45 | 50 | 65 | 60 | 65 |
| | | 7:00 a.m. to 10:00 p.m. | 50 | 55 | 70 | 65 | 70 |
| III | Commercial | 10:00 p.m. to 7:00 a.m. | 55 | 60 | 75 | 70 | 75 |
| | | 7:00 a.m. to 10:00 p.m. | 60 | 65 | 80 | 75 | 80 |
| IV | Industrial | Anytime | 70 | 75 | 90 | 85 | 90 |

**SOURCE**: Los Angeles County Municipal Code, *Section 12.08.390 Exterior Noise Standards*, 1978.

**TABLE 3-25: LOS ANGELES COUNTY INTERIOR NOISE STANDARDS**

| Noise Zone | Land Use (Receptor Property) | Time Interval | Allowable Interior Noise Level (dB) |
|---|---|---|---|
| All | Multi-family Residential | 10:00 p.m. to 7:00 a.m. (nighttime) | 40 |
| | | 7:00 a.m. to 10:00 p.m. (daytime) | 45 |

**SOURCE**: County of Los Angeles, *Los Angeles County Code Sections 12.08.390 and 12.08.400*, December 1, 2022.

The sound levels and durations specified in the Noise Ordinance are expressed as "sound level percentiles" or "statistical sound levels." Noise prediction models are designed to utilize average noise levels, $L_{eq}$, to document noise levels when predicting sound. The $L_{50}$, $L_{25}$, $L_{8.3}$ and $L_{1.7}$ values vary depending on the noise sources, and the reference noise levels of the noise sources are often only provided as average noise levels. $L_{50}$ most closely reflects an $L_{eq}$ noise level and, therefore, the operational analysis has been prepared using $L_{50}$.

CMC Section 5502(d) prohibits loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans or similar objects between the hours of 9:00 p.m. and 7:00 a.m. in such a manner as to cause noise disturbance. Additionally, the City's General Plan Update Noise Element includes interior and exterior noise limits from transportation sources for various land uses in both exterior and interior environments. **Table 3-26** shows the City's General Plan Update Noise Element interior and exterior noise standards that development are required to attain through noise attenuation measures. The standard interior noise for residential land uses (45 dBA, CNEL) is consistent with the CBC.

**Operational Activities – On-Site Mechanical Equipment.** HVAC systems may generate unwanted noise in the Project Site vicinity. HVAC equipment without muffling or enclosures typically generates a noise level of approximately 57 dBA, $L_{50}$ at 50 feet. HVAC equipment would either be located on the rooftop of buildings, in enclosed mechanical equipment sheds or underground. The enclosure would further reduce noise levels by approximately 10 dB, resulting in a noise level of 47 dBA, $L_{50}$ at 50 feet. HVAC equipment is regulated by Section 12.08.530 of the Los Angeles County Noise Ordinance, which limits HVAC noise from exceeding 55 dBA at the neighboring property line. HVAC equipment would be located more than 50 feet away from the nearest sensitive receptors and would not exceed 55 dBA at any neighboring property line. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-26: CITY OF CARSON INTERIOR AND EXTERIOR NOISE LIMITS FROM TRANSPORTATION SOURCES**

| Land Use Categories | | Noise Level (dBA, CNEL) | |
|---|---|---|---|
| **Categories** | **Uses** | **Interior[1,3]** | **Exterior[2,4]** |
| Residential | Single family Duplex, Multiple Family | 45 – 55 | 50 – 60 |
| | Mobile Home | 45 | 65 |
| Commercial Industrial Institutional | Hotel, Motel, Transient Lodging | 45 | — |
| | Commercial Retail, Bank, Restaurant | 55 | — |
| | Office Building, Research and Development, Professional Offices, City Office Building | 50 | — |
| | Amphitheater, Concert Hall, Auditorium, Meeting Hall | 45 | — |
| | Gymnasium (Multipurpose) | 50 | — |
| | Sports Club | 55 | — |
| | Manufacturing, Warehousing, Wholesale, Utilities | 65 | — |
| | Movie Theaters | 45 | — |
| Institutional | Hospital, Schools Classrooms | 45 | 65 |
| | Church, Library | 45 | — |
| Open Space | Parks | — | 65 |

**Notes**: CNEL = community noise equivalent level
1. Indoor environment includes bedrooms, living areas, bathrooms, toilets, closets, and corridors.
2. Outdoor environment is limited to private yards of single-family residences; multi-family private patios or balconies that are served by a means of exit from inside the dwelling (balconies 6 feet deep or less are exempt); mobile home parks; park picnic areas; and school playgrounds.
3. Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as required pursuant to Uniform Building Code Chapter 12, Section 1205.
4. Exterior noise levels should be such that interior noise levels do not exceed 45 dBA, CNEL. An exterior noise exposure level of 65 dBA, CNEL is allowable for residential uses in a mixed-use project.

**SOURCE**: City of Carson, *Carson 2040 General Plan, Chapter 9: Noise Element*, Adopted April 4, 2023.

**Operational Activities – On-Site Parking Noise.** The existing parking configuration for the Project Site consists of three surface parking lots. The Modified Project would provide parking in subterranean parking garages and two podium parking structures. Parking-related noise from the subterranean parking garages would not be noticeable in the surrounding area. The podium parking structures would be located at the Hotel/Entertainment Retail Parcel and the Mixed-Use Housing Parcel, each with approximately 640 parking spaces. According to FTA, a 1,000-space parking garage generates a noise level of approximately 56.4 dBA, $L_{eq}$ at 50 feet in the peak activity hour. Adjusted for a 640-space parking garage, the proposed 640-space parking garage which would generate a noise level of approximately 54.5 dBA, $L_{eq}$ at 50 feet during the peak activity hour. Parking-related noise generated by the new hotel podium parking structure would result in a noise level of approximately 44.9 dBA, $L_{eq}$ at the nearest residences to the north along Desford Street. Parking-related noise generated by the mixed-use housing podium parking structure would result in a noise level of approximately 42.4 dBA, $L_{eq}$ at the nearest residences to the east along Desford Street. Existing measured noise levels at these residences (Site Number 2 from **Table 3-18**) is approximately 55.3 dBA, $L_{eq}$. Parking-related noise would be below the existing measured noise level and would not result in a significant change in ambient noise levels. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Operational Activities – On-Site Outdoor Spaces.** The Modified Project would include pedestrian pathways and open space areas (including an outdoor amphitheater at Jewel Plaza). The primary source of noise during typical project operations would be people conversing. In social situations, people often talk at distances of approximately three feet. A typical normal voice level at this

distance is approximately 65 dBA and a raised voice level is approximately 77 dBA.[35] Noise related to the pedestrian pathways and open space areas would primarily be intermittent as people traverse them and would not present a concentrated noise source. Noise levels associated with these components would be confined to the interior of the Project Site and would not be audible above existing traffic noise in the surrounding streets, which ranges from 67.5 to 74.3 dBA, $L_{eq}$. The pedestrian pathways and open space areas would also be situated away from the residential neighborhood to the north, which have a lower existing ambient noise level of approximately 55.3 dBA, $L_{eq}$ (Site Number 2 from **Table 3-18**). Additionally, intervening buildings would block noise generated from these outdoor spaces from the residential neighborhood to the north. Therefore, these proposed outdoor uses would not result in an increase in ambient noise levels at noise sensitive receptors.

The open space areas, including the amphitheater at Jewel Plaza, would potentially be used as a gathering space for events, and it has been assumed that approximately 100 people could be active in a given area of the plaza at one time. One hundred people speaking in raised voices would generate a noise level of approximately 97 dBA at 3 feet. The center of Jewel Plaza would be located approximately 450 feet from the nearest residences to the west along Avalon Boulevard and the resultant noise level would be approximately 53 dBA. The existing ambient noise level at these residences is approximately 71.7 dBA, $L_{eq}$ and noise from Jewel Plaza would not result in a significant increase above existing noise levels. Residence to the north along Desford Street would be located approximately 400 feet from the center of Jewel Plaza and the resultant noise level would be approximately 50 dBA, which accounts for building shielding created by the proposed structures. The existing ambient noise level at these residences is approximately 55.3 dBA, $L_{eq}$ and, thus, noise generated at Jewel Plaza during events would not result in a significant increase above existing noise levels. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Operational Activities – On-Site Event Spaces and Performing Arts Theater.** The Modified Project would include a remodeled Community/Event Center and a new performing arts center. Noise would be potentially generated by these spaces during their use. However, events occurring in these areas would be located indoors and would be contained by the building. Thus, noise generated from these uses would not be perceptible at sensitive receptors surrounding the Project Site. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Operational Activities – Off-Site Vehicle Noise along Roadways. Table 3-27** shows roadway noise levels for Existing (2026), Existing Plus Project (2026), Future No Project (2050), and Future Plus Project (2050) conditions. **Table 3-28** shows changes in roadway noise levels with implementation of the Modified Project compared to Existing (2026) and Future No Project (2050). Predicted noise levels were calculated using average daily traffic for six roadway segments. As shown in **Table 3-28**, the roadway noise increase attributed to the Modified Project would be less-than-one dBA, CNEL along local roadways in both the Existing (2026) and Future (2050) No Project conditions and is not anticipated to result in a perceptible change in sound level for a person with normal hearing sensitivity or result in a 5 dBA CNEL or more increase. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[35]SoundPLAN Essential, Version 6.0.

**TABLE 3-27: MOBILE SOURCE NOISE LEVELS – MODIFIED PROJECT**

| Roadway Segment | Predicted dBA, CNEL | | | |
|---|---|---|---|---|
| | Existing (2024) | Existing Plus Modified Project (2026) | Future No Project (2050) | Future Plus Project Option (2050) |
| Avalon Blvd between I-405 Ramps and 213th St | 67.7 | 68.0 | 68.0 | 68.4 |
| Avalon Blvd between 213th St and Carson St | 69.0 | 69.1 | 69.3 | 69.5 |
| Avalon Blvd between Carson St and 220th St | 67.8 | 68.0 | 68.1 | 68.4 |
| Carson St between Grace Ave and Avalon Blvd | 70.8 | 70.9 | 71.1 | 71.2 |
| Carson St between Avalon Blvd and Bonita St | 69.8 | 69.9 | 70.1 | 70.3 |
| Carson St between Bonita St and I-405 Ramps | 70.6 | 70.9 | 70.9 | 71.4 |

**Note:** Noise calculations can be found in **Appendix B**.
**SOURCE:** TAHA, 2025.

**TABLE 3-28: CHANGE IN MOBILE SOURCE NOISE LEVELS – MODIFIED PROJECT**

| Roadway Segment | Predicted dBA, CNEL | | |
|---|---|---|---|
| | Existing Plus Modified Project Increase Over Existing Year (2026) | Future Plus Modified Project Increase Over Future Year (2050) | Future Plus Modified Project Increase Over Existing Year (2026) |
| Avalon Blvd between I-405 Ramps and 213th St | 0.3 | 0.3 | 0.6 |
| Avalon Blvd between 213th St and Carson St | 0.1 | 0.1 | 0.4 |
| Avalon Blvd between Carson St and 220th St | 0.2 | 0.1 | 0.4 |
| Carson St between Grace Ave and Avalon Blvd | 0.1 | 0.1 | 0.4 |
| Carson St between Avalon Blvd and Bonita St | 0.1 | 0.1 | 0.4 |
| Carson St between Bonita St and I-405 Ramps | 0.3 | 0.3 | 0.6 |

**SOURCE:** TAHA, 2025.

### *Summary*

Construction of the Modified Project would not result in an exceedance in the daytime construction noise standard of 65 dBA, $L_{eq(8\text{-hour})}$ or the nighttime standard of 60 dBA $L_{eq(8\text{-hour})}$ for sensitive receptors with implementation of **Mitigation Measures NOI-1** through **NOI-3**. During operational activities, equipment noise levels are not expected to exceed the standards set by 12.08.530 of the Los Angeles County Noise Control Ordinance. Predicted noise from the proposed parking structures, open space areas, and pedestrian pathways would be less than existing noise levels measured at noise sensitive receptors. Off-site roadway noise would result in a less- than-one dBA, CNEL increase, which would not be a perceptible change above existing noise levels. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### Entertainment Retail Option

The Entertainment Retail Option would include similar sources of construction noise and operational noise as the Modified Project. Construction noise levels would potentially exceed the 65 dBA, $L_{eq(8\text{-hour})}$ construction noise threshold, and Mitigation Measures **NOI-1** through **NOI-3** would be required to reduce construction noise levels to below the construction noise threshold.

The Entertainment Retail Option would generate similar noise levels as the Modified Project related to mechanical equipment, outdoor spaces, the community/event center, and new performing arts center. However, the Entertainment Retail Option would increase the number of parking spaces for the podium parking structure at the Hotel/Entertainment Retail Parcel to 1,000 spaces. Additionally, the Entertainment Retail Option would include commercial space that is allocated for immersive entertainment for sports, arts, movies and other forms of entertainment at the Hotel/Entertainment Retail Parcel. This use may potentially include an outdoor rooftop area where patrons would gather, which would potentially generate noise at off-site noise sensitive receptors.

According to the FTA, a 1,000-space parking garage generates a noise level of approximately 56.4 dBA, $L_{eq}$ at 50 feet in the peak activity hour. Parking-related noise generated by the new podium parking structure at the Hotel/Entertainment Retail Parcel would result in a noise level of approximately 46.9 dBA, $L_{eq}$ at the nearest residences to the north along Desford Street. Existing measured noise levels at these residences (Site Number 2 from **Table 3-18**) is approximately 55.3 dBA, $L_{eq}$. Parking-related noise would be below the existing measured noise level at the residences to the north along Desford Street and would not result in a significant change in ambient noise levels.

If an outdoor rooftop area is proposed for the Entertainment Retail Option, ambient noise levels could potentially increase in this area. Human voice would be the primary source of stationary noise for the proposed Entertainment Retail Center. In social situations, people often talk at distances of approximately three to 12 feet. A typical normal speaking voice at three feet is approximately 60 dBA, a typical raised voice at the same distance is approximately 66 dBA, and a person shouting is equivalent to 78 dBA at 3 feet.[36] Assuming that 200 people would potentially be on the roof at any given time, approximately 100 people, or half of the rooftop occupants, would be speaking at one time in raised voices. As shown in **Table 3-29**, rooftop noise would exceed the daytime and nighttime standard at the single-family residences to north along Desford Street, and mitigation would be required to reduce noise levels to below the daytime and nighttime standards. **Mitigation Measure NOI-4** would require the installation of six-foot high barriers along the northern, western, and eastern perimeter of the rooftop gathering area. As shown in **Table 3-30**, rooftop noise would be reduced to below the daytime and nighttime noise standards with implementation of **Mitigation Measure NOI-4**.

**Table 3-31** shows roadway noise levels for the Existing Plus Entertainment Retail Option (2026) and Future Plus Entertainment Retail Option (2050). **Table 3-32** shows changes in roadway noise levels with implementation of the Entertainment Retail Option compared to Existing (2026) and Future No Project (2050) conditions. Predicted noise levels were calculated using average daily traffic for six roadway segments. As shown in **Table 3-32**, the roadway noise increase attributed to the Entertainment Retail Option would be less-than-one dBA, CNEL along local roadways in both the Existing (2026) and Future (2025) Year conditions and is not anticipated to result in a perceptible change in sound level for a person with normal hearing sensitivity or result in a 5 dBA, CNEL or more increase.

[36] Engineering Toolbox, *Voice Level at Distance, Raised Voice at 3 feet*, https://www.engineeringtoolbox.com/voice-level-d_938.html, accessed September 2020.

**TABLE 3-29: ROOFTOP GATHERING SPACE NOISE LEVELS AT SENSITIVE RECEPTORS – MODIFIED PROJECT**

| Sensitive Receptors | Distance to Rooftop (Feet) | Noise Level at Sensitive Receptor (dBA, $L_{50}$) | County Standard (dBA, $L_{50}$) | | Exceed Standard | |
|---|---|---|---|---|---|---|
| | | | Day | Night | Day | Night |
| Single-family residences to the north along Desford St | 250 | 59.6 | 55.3 | 50.3 | Yes | Yes |
| Single-family residences north of Desford St | 425 | 55.0 | 55.3 | 50.3 | No | No |
| Single- and multi-family residences to the west along Avalon Blvd | 1,200 | 46.0 | 70.3 | 66.7 | No | No |
| Single- and multi-family residences to the south along Carson St | 630 | 51.6 | 71.7 | 66.7 | No | No |
| Golden Wings Academy to the South | 500 | 53.6 | 71.7 | n/a | No | n/a |
| Carnegie Middle School to the South | 670 | 51.0 | 71.7 | n/a | No | n/a |

**Note:** Noise calculations can be found in **Appendix D**.
n/a = not applicable as schools do not have nighttime classes or operations.
**SOURCE:** TAHA, 2025.

**TABLE 3-30: MITIGATED ROOFTOP GATHERING SPACE NOISE LEVELS AT IMPACTED SENSITIVE RECEPTORS – MODIFIED PROJECT**

| Sensitive Receptors | Distance to Rooftop (Feet) | Noise Level at Sensitive Receptor (dBA, $L_{50}$) | County Standard (dBA, $L_{50}$) | | Exceed Standard | |
|---|---|---|---|---|---|---|
| | | | Day | Night | Day | Night |
| Single-family residences to the north along Desford St | 250 | 49.6 | 55.3 | 50.3 | No | No |

**Note:** Noise calculations can be found in **Appendix D**.
**SOURCE:** TAHA, 2025.

**TABLE 3-31: MOBILE SOURCE NOISE LEVELS – ENTERTAINMENT RETAIL OPTION**

| Roadway Segment | Predicted dBA, CNEL | | | |
|---|---|---|---|---|
| | Existing (2024) | Existing Plus Project Option (2026) | Future No Project (2050) | Future Plus Project Option (2050) |
| Avalon Blvd between I-405 Ramps and 213th St | 67.7 | 68.1 | 68.0 | 68.4 |
| Avalon Blvd between 213th St and Carson St | 69.0 | 69.2 | 69.3 | 69.5 |
| Avalon Blvd between Carson St and 220th St | 67.8 | 68.1 | 68.1 | 68.4 |
| Carson St between Grace Ave. and Avalon Blvd | 70.8 | 70.9 | 71.1 | 71.2 |
| Carson St between Avalon Blvd. and Bonita St | 69.8 | 70.0 | 70.1 | 70.3 |
| Carson St between Bonita St and I-405 Ramps | 70.6 | 71.1 | 70.9 | 71.4 |

**Note:** Noise calculations can be found in **Appendix D**.
**SOURCE:** TAHA, 2025.

**TABLE 3-32: CHANGE IN MOBILE SOURCE NOISE LEVELS – ENTERTAINMENT RETAIL OPTION**

| Roadway Segment | Predicted dBA, CNEL | | |
|---|---|---|---|
| | Existing Plus Project Option Increase Over Existing Year (2026) | Future Plus Project Option Increase Over Future Year (2050) | Future Plus Project Option Increase Over Existing Year (2026) |
| Avalon Blvd between I-405 Ramps and 213th St | 0.4 | 0.4 | 0.7 |
| Avalon Blvd between 213th St and Carson St | 0.2 | 0.2 | 0.5 |
| Avalon Blvd between Carson St and 220th St | 0.3 | 0.3 | 0.6 |
| Carson St between Grace Ave and Avalon Blvd | 0.1 | 0.1 | 0.4 |
| Carson St between Avalon Blvd. and Bonita St | 0.2 | 0.2 | 0.5 |
| Carson St between Bonita St and I-405 Ramps | 0.5 | 0.5 | 0.8 |

**SOURCE:** TAHA, 2025.

Operational noise impacts would be less than significant related to mechanical equipment, outdoor spaces, parking noise, and vehicle trips. However, rooftop gathering space at the Hotel/Entertainment Retail Parcel may generate noise levels that could exceed the exterior noise standards at residences to the north of the Project Site. Implementation of **Mitigation Measure NOI-4**, which requires the installation of six-foot high barriers along the northern, western, and eastern perimeter of the rooftop gathering area, would reduce exterior noise levels to below the noise standards, and impacts would be reduced to less than significant levels.

With implementation of **Mitigation Measures NOI-1** through **NOI-4**, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### Mitigation Measures

**NOI-1** A public liaison shall be appointed for project construction and shall be responsible for notifying the public in advance of the location, dates, and hours of construction (on-site and/or social media posting). The public liaison shall also be responsible for addressing public concerns about construction activities, including excessive noise. As needed, the liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and implement measures to address the concern.

**NOI-2** If construction noise is noted to be disruptive to school activities at Golden Wing Academy and/or Carnegie Middle School, the contractor shall monitor noise levels at the school(s) to determine equipment noise levels. If it is found that equipment noise exceeds 80 dBA, $L_{eq(8\text{-}hour)}$ at the school(s), then the contractor shall implement additional measures to reduce the noise levels at the school(s).

**NOI-3** During construction, barriers, such as, but not limited to, plywood structures or flexible sound control curtains, extending 10 feet in height shall be erected around the northern, western, and southern perimeters of the construction site to block the line-of-sight between noise sensitive receptors and construction equipment. Noise barriers shall be capable of reducing construction noise levels by at least 15 dBA. The barriers shall not create safety hazards associated with vehicle sight lines or access to the Project Site.

**NOI-4** Outdoor rooftop areas for the Entertainment Retail Option shall include the installation of six-foot high solid transparent or opaque barriers along the northern, western, and eastern perimeter of the rooftop space such that the line-of-sight from the rooftop activities to

residences to the north of the Project Site would be blocked. The barriers shall be capable of reducing noise by at least 10 dBA.

***(b) Would the Project result in the generation of excessive groundborne vibration or groundborne noise levels?***

***Construction***

Construction activities can generate varying degrees of vibration depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of a construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, and to damage at the highest levels. Vibration sensitive land uses are the same as noise-sensitive land uses identified in the response to Checklist Question 3.13.2(a).

Because construction activity is short-term and equipment moves around the Project Site, the primary concern regarding construction vibration relates to building damage. Activities that can result in damage include site preparation in close proximity to sensitive structures. Typical vibration levels associated with relevant construction equipment are provided in **Table 3-33**. Importantly, construction of the Modified Project would not require pile driving, which generates elevated vibration levels above what typical construction equipment does.

**TABLE 3-33: VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT**

| Equipment | Peak Particle Velocity at 25 feet (Inches/Second) |
|---|---|
| Large Bulldozer | 0.089 |
| Loaded Trucks | 0.076 |
| Small Bulldozer | 0.003 |

**SOURCE**: FTA, *Transit Noise and Vibration Impact Assessment*, September 2018.

The City has not established vibration standards for construction activities. FTA has published guidance stating that non-engineered timber and masonry buildings (e.g., typical single-family residential buildings) can withstand peak particle velocity (PPV) vibration levels of at least 0.2 inches per second without experiencing damage. The nearest off-site structures are single-family residences located to the north of the Project Site. Vibration levels at the nearest residential structures would be approximately 0.044 inches per second and would not exceed the 0.2 inches per second vibration damage threshold. Similarly, other structures located further away would not experience vibration levels that would exceed the vibration damage threshold. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Operational Activities.** The Modified Project would not include significant sources of vibration. Passenger vehicles and delivery trucks associated with the Modified Project would not generate perceptible vibration as rubber-tired vehicles rarely create ground-borne vibration problems unless there is a discontinuity or bump in the road that causes the vibration.[37] Therefore, the Modified

[37]FTA, *Transit Noise and Vibration Impact Assessment*, September 2018.

Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

Construction and operation of the Entertainment Retail Option would utilize similar equipment and operational sources of vibration as the Modified Project. Construction of the Entertainment Retail Option would occur within the same footprint as the Modified Project. Vibration levels would be similar to the Modified Project and would not exceed the 0.2 inches per second vibration damage threshold. Operational vibration sources under the Entertainment Retail Option would be the same as the Modified Project and would not result in the generation of substantial vibration. Therefore, the Project Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the project area to excessive noise levels?***

The Modified Project is not located within an airport land use plan and is not within two miles of a private airstrip or public airport. The nearest airport is Compton/Woodley Airport, approximately 3.8 miles to the north. There is no potential to expose people working or residing in the area to excessive aircraft noise. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be located on the same Project Site as the Modified Project. The Entertainment Retail Option has no potential to expose people working or residing in the area to excessive aircraft noise. Therefore, the Project Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.13.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.13.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. The Modified Project and Entertainment Retail Option includes information on proposed uses for the Project Site that were not known at the time the EIR for the General Plan Update was certified. An update to the Certified EIR noise analysis is presented above. As discussed, the Modified Project and its Entertainment Retail Option would result in noise levels that exceed the daytime construction noise standard of 65 dBA, $L_{eq(8\text{-}hour)}$ and the nighttime standard of 60 dBA $L_{eq\ (8\text{-}hour)}$ for sensitive receptors. Additionally, rooftop gathering area for the Entertainment Retail Option would exceed the daytime and nighttime standard at the single-family residences to north along Desford Street. However, implementation of **Mitigation Measures NOI-1** through **NOI-3** during construction for the Modified Project and its Entertainment Retail Option, and **Mitigation Measure NOI-4** during operations of the rooftop gathering space for the Entertainment Retail Option would reduce noise levels to below the noise standards, and impacts would be reduced to less than significant levels. No new significant impacts would occur with implementation of mitigation measures. Therefore, the Modified Project and its Entertainment Retail Option would not result in significant effects that are not substantially more severe than shown in the Certified EIR.

### 3.13.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.13.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.14 POPULATION AND HOUSING

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **POPULATION AND HOUSING**. Would the project: | | | | | |
| (a) Induce substantial unplanned population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | Less Than Significant | No | No | No | No |
| (b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | No Impact | No | No | No | No |

## 3.14.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?*

As discussed in the Certified EIR, the City has a Regional Housing Needs Assessment (RHNA) obligation of 5,618 new units, which is a significant increase from previous RHNA allocations of previous housing cycles. Given that a housing cycle has a planning period of eight years, extrapolating this RHNA requirement to the General Plan Update's 2040 horizon would result in about 14,000 new units. Recognizing that market trends are difficult to predict, RHNA numbers are subject to change in the future, and growth is not a linear process, the General Plan Update very closely matches this value on an order of magnitude, with a potential buildout of 13,690 units between 2020 and 2040. New residential opportunities are a result of targeted residential density increases in new mixed-use designations along corridors and in the downtown Core area to provide higher density housing near jobs and community-serving retail and services. This type of infill development is designed to focus on redevelopment and revitalization of areas already served by infrastructure and would not require extensions of roads or other infrastructure. Additionally, General Plan Update policies seek to provide housing that meets the diverse needs of Carson's growing population while preserving existing neighborhoods, as well as ensure that public facilities, services, and infrastructure maintain a level of service that supports a high quality of life for all residents.

The General Plan Update is a long-range planning effort that was designed to accommodate regional growth requirements for the next 20 years. As such, the Certified EIR concluded that the General Plan Update would not induce substantial unplanned population growth, either directly or indirectly, and this impact is considered less than significant.

### *(b) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

As discussed in the Certified EIR, a substantial portion (about 26 percent) of developed land in the Planning Area consists of single-family residential uses, which are not anticipated to undergo significant land use changes under the General Plan Update. The General Plan Update focuses infill development opportunities in vacant and underutilized areas in Carson, while seeking to preserve

existing neighborhoods. Industrial uses make up the largest amount of land area within the Planning Area (about 47 percent). New land use classifications introduce greater flexibility of uses, such as mixed-use, and allow residential uses in more areas of the City, including many that are currently single uses. New mixed-use designations downtown and along key corridors also enable greater opportunities for future residential development. As such, the General Plan Update is projected to increase the overall number of dwelling units and provide additional housing opportunities to serve the diverse needs of the community at various socioeconomic levels.

Article 10.6 of the California Government Code outlines the state's Housing Element requirements. A housing element must analyze existing and projected housing needs, examine special housing needs within the population, evaluate the effectiveness of current goals and policies, identify governmental and other constraints, determine compliance with other housing laws, and identify opportunities to incorporate energy conservation into the housing stock. The element must also establish goals, policies, and programs to maintain, enhance, and develop housing. Though initially prepared as part of the General Plan Update, the City of Carson's 6$^{th}$ Cycle Housing Element has been separately adopted as of February 1, 2022. The Housing Element has been designed to be consistent with the General Plan Update and reflects the new land use designations that allow greater residential densities as described above in order to meet the RHNA obligation for the 2021–2029 housing element cycle. In addition, the Housing Element includes an in-depth analysis of the City's housing stock, past and anticipated trends, and housing needs that inform the element's goals, policies, and programs, which include provisions to preserve, maintain, and rehabilitate existing housing, particularly affordable housing. The General Plan Update includes policies that support these objectives, including those that seek to ensure equity and protect diversity in Carson's communities.

The Certified EIR concluded that for these reasons, growth anticipated under the General Plan Update would not displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere, and this impact is less than significant.

**General Plan Update Policies that Address Population and Housing**

***Land Use and Revitalization***

*Guiding Policies*

LUR-G-4 Promote a diversity of complementary uses in different parts of the City, including mixed flexible office space, retail, dining, residential, hotels, and other compatible uses, to foster vibrant, safe, and walkable environments, with flexibility to accommodate emerging uses and building typologies.

LUR-G-5 Provide opportunities for new residential development in a variety of settings, including through infill and redevelopment, without impacting existing neighborhoods or creating conflicts with industrial operations, while conserving

LUR-G-9 Locate medium and high-density development along major corridors and major re-development sites in the central Core, to focus housing near regional access routes, transit stations, employment centers, shopping areas, and public services.

LUR-G-12 Promote adaptive reuse and environmental remediation of brownfield sites, sites with abandoned buildings and facilities, or underutilized properties with productive uses.

*Implementing Policies*

LUR-P-1 Where feasible, locate higher density residential uses in proximity to job centers and commercial centers in order to discourage long commute times and encourage pedestrian traffic and provide a consumer base for commercial uses.

LUR-P-2 Promote development of a range of housing types, including single-family homes on small lots, accessory dwelling units, townhomes, lofts, live-work spaces in transitioning industrial districts, and senior and student housing to meet the needs of future demographics and changing family sizes.

LUR-P-3 Promote rehabilitation or redevelopment of older or dilapidated housing.

LUR-P-4 Undertake a study to assess the feasibility and effectiveness of requiring inclusionary housing as part of residential development projects, and commercial/industrial and housing linkage fees.

LUR-P-5 Support retention of existing mobile home parks as a form of affordable housing when feasible. When retention of existing mobile home parks is not feasible, require at minimum a one-to-one replacement of mobile home units with affordable housing units within the new development and undertake efforts to relocate existing residents to within the community in compliance with state requirements and local regulations.

LUR-P-16 Where larger parcels—such as the Shell site—are redeveloped, require development to implement urban design policies, including creation of smaller blocks (typically with no dimension larger than 300 to 600 feet dependent on use, with smaller blocks in residential areas) to create walkable, urban environments; buildings and landscapes that relate to the surroundings, with high-level of public-realm amenities, such as tree-lined streets; sidewalks, pedestrian paths, and crossings; and plazas and other gathering spaces for workers and visitors. Site planning for new construction should ensure that streets are lined with occupied buildings or landscapes, with parking and service facilities tucked behind or away from public streets.

LUR-P-18 Promote infill mixed-use development in either a vertical or horizontal configuration when aging shopping centers are redeveloped to create mixed-use corridors with a range of housing types at mid-to-high densities along their lengths and activity nodes at key intersections with retail/commercial uses to serve the daily needs of local residents.

LUR-P-23 Undertake planned development and specific plans for unique projects as a means to achieve high community standards, address neighborhood or significant site-specific issues, ensure compatibility between a number of uses, on large parcels, and when needed as part of a redevelopment or environmental remediation strategy

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-1 Maintain a balanced and integrated open space system reflecting a variety of considerations—resource conservation, production of resources, recreation, and aesthetic and community identity—and ensuring synergies between various open space components and compatibility with land use planning.

OSEC-G-10 Provide for utilities and infrastructure to deliver safe, reliable services for current and future residents and businesses.

**Mitigation Measures**

None required.

### 3.14.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?***

The Modified Project is located in an urban area of Los Angeles County with sufficient local workforce available for construction. While construction of the Modified Project would create temporary construction-related jobs, the work requirements of most construction projects are highly specialized so that construction workers remain at a job site only for the time in which their specific skills are needed to complete a particular phase of the construction process. Accordingly, construction workers associated with the Modified Project are not anticipated to relocate their household's place of residence as a consequence of working on the Modified Project and, therefore, no new permanent residents are anticipated as a result of Modified Project construction.

According to the US Census Bureau, the City has an estimated population of 91,370 and an average household size of 3.21 persons per household in 2024.[38] Based on the average household size for the City, the Modified Project is estimated to increase population by approximately 450 persons. SCAG forecasts the City would have a population of 100,200 by year 2050, which is an increase of 8,830 persons over the next 20 years.[39] The estimated population increase of approximately 450 persons by the Modified Project, which would represent approximately 5 percent of the projected population increase for the City, would not be expected to exceed the SCAG 2050 population forecast for the City. Therefore, the Modified Project would not add growth beyond what was anticipated for the City.

The state housing element law requires SCAG to determine the amount of housing needed within its six-county region and allocate a share of the regional housing need to each community. California Government Code Section 65583 requires a city's housing element to make adequate provision for the housing needs of all economic segments of the community, including assisting in the development of adequate housing to meet the needs of extremely low-, very low-, low-, and moderate-income households. California Government Code Section 65583 also requires local jurisdictions to provide their "fair share" of regional housing needs. The City has been allocated a total production goal of 5,618 housing units for the 2021-2029 period.[40] The Modified Project would contribute to the City's "fair share" of regional housing needs as the Modified Project would provide up to 140 residential units.

The Modified Project is located in a developed portion of the City and is served by existing roads and utility infrastructure. The Modified Project does not propose extension of roads or other infrastructure that would encourage development beyond what is already planned elsewhere in the City. The Modified Project is an infill development that would redevelop the City's Civic Center that would promote a mix of uses on the Project Site that promotes pedestrian activities and transit use and would support the revitalization of the City's Downtown Core. The Modified Project would provide higher density housing near jobs and community-serving retail and services.

[38]United States Census Bureau, *Carson City, California*, *DP05 and B25002 - 2024 American Community Survey 1-Year Estimates*, https://data.census.gov/profile/Carson_city,_California?g=160XX00US0611530, accessed September 2025.

[39]SCAG, Growth Forecast by Jurisdiction for *2020 Connect SoCal*, adopted September 3, 2020.

[40]SCAG, *SCAG 6th Cycle Final RHNA Allocation Plan*, approved March 22, 2021 and modified 7/1/2021.

As the Modified Project would be within the SCAG 2050 population forecast for the City and would contribute to the regional housing needs allocated to the City, the Modified Project would not directly or indirectly induce substantial unplanned population growth. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site and proposes the same number and types of housing units as the Modified Project. As with the Modified Project, the Entertainment Retail Option is an infill project located in the Downtown Core of the City where existing infrastructure is already in place. The Entertainment Retail Option would be within the SCAG 2050 population forecast for the City and would contribute to the regional housing needs allocated to the City. The Modified Project would not directly or indirectly induce substantial unplanned population growth. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?***

The Project Site currently consists of two buildings that are used for public facility purposes (i.e., Carson City Hall and Carson Community Center). No housing units are located on the Project Site, and the Modified Project would not displace any people or housing. As a result, the proposed project would not necessitate the construction of replacement housing elsewhere. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site as the Modified Project. As with the Modified Project, no housing units or residents would be displaced by the Entertainment Retail Option, and the Entertainment Retail Option would not necessitate the construction of replacement housing elsewhere. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.14.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.14.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.14.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.14.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.15 PUBLIC SERVICES

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **PUBLIC SERVICES**. Would the project: | | | | | |
| (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | | | | | |
| i) Fire protection? | Less Than Significant | No | No | No | No |
| ii) Police protection? | Less Than Significant | No | No | No | No |
| iii) Schools? | Less Than Significant | No | No | No | No |
| iv) Parks? | Less Than Significant | No | No | No | No |
| v) Other public facilities? | Less Than Significant | No | No | No | No |

## 3.15.1 IMPACT DETERMINATION IN THE EIR

***(a) Would the Project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(i) Fire Protection?***

As discussed in the Certified EIR, while the projected net service population increase of 43,600 residents by 2040 would likely increase the demand for emergency fire response and preventive services in the Planning Area, the increase in population would occur incrementally over the next 20 years. Moreover, the Planning Area is a predominantly urban area that is "built out," with limited land available for development, and General Plan Update policies promote infill and revitalization strategies that foster compact development patterns. As such, new growth would primarily occur within existing service areas. No new fire service facilities are included in the General Plan Update.

Existing City and County of Los Angeles policies would minimize calls for fire protection services. The City's Fire Prevention Code (CMC Article III, Chapter 1) adopts an amended version of the County's fire code, which itself constitutes an amended version of the California Fire Code. The City is a Local Responsibility Area (LRA) but does not contain any FHSZs, and most fire hazards in the Planning Area are characterized as urban fires. Policies included in the General Plan Update requiring the fire department's review of development proposals and coordination with the fire

department to reduce risk of and improve response to fires due to industrial activities would help to keep service demand increases to a minimum. In addition, the General Plan Update promotes compact development patterns through infill development, ensuring new development would be located close to existing fire stations. In general, new development anticipated under the General Plan Update would be located near the City's core and along major corridors. Furthermore, policies that promote traffic calming, alternative transportation, and road diets contain language to ensure that emergency vehicles could efficiently access all parts of the Planning Area, thereby reducing the need for new facilities located closer to new development.

Should new fire service facilities need to be constructed in the future, construction of those facilities could result in environmental impacts, including potential disturbances or conversion of habitat, water pollution during construction, increased noise levels, and an increase in impermeable surfaces. If implementation of the General Plan Update results in the need for new fire service facilities, existing regulations such as CALGreen would serve to reduce potential environmental impacts associated with construction. Additionally, new projects would be subject to CEQA requirements for environmental assessment, which would allow for the identification and consideration of potential impacts and mitigation, although compliance would not necessarily guarantee that significant impacts would be avoided or mitigated. New facilities would be located consistent with specified land use designations and would be subject to policies in the General Plan Update. These policies would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Policies include those requiring construction BMPs to limit land disturbance, development review to protect significant biological resources, air pollution mitigation measures, promotion of water- and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development. The Certified EIR concluded that due to the minimal effects that the development of new facilities could have on the environment with compliance with existing regulations and General Plan Update policies, the concentration of new development in areas already well-served by fire protection services, and the addition of policies to reduce fire hazards in the City, the impact of the General Plan Update with respect to fire protection is considered less than significant.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(ii) Police Protection?***

As discussed in the Certified EIR, no new police service facilities are included in the General Plan Update. However, the Los Angeles County Sheriff's Department (LASD) maintains other facilities outside of the Planning Area that are available to the City immediately, including the Homicide Bureau, Aero Bureau, OSS (gang unit), and Traffic Services Bureau. If needed, 22 other LASD stations are also available to send resources to the City. There are approximately 1.9 officers per 1,000 residents in the City as of 2020. While the General Plan Update would result in additional population that might increase demand for police services, policies would reduce the need for additional police services. The General Plan Update promotes Crime Prevention through Environmental Design (CPTED) and other public safety programs, which would help to keep service demand increases to a minimum. In addition, policies promote compact development patterns achieved through infill development and revitalization of mixed-use areas in the core and along key corridors. Thus, potential future development would be located close to the existing police station. Furthermore, policies regarding emergency access, and acceptable travel flow would ensure that

emergency vehicles could efficiently access all parts of the Planning Area, thereby reducing the need for new facilities located closer to new development.

Should new police service facilities need to be constructed in the future, construction of those facilities could result in environmental impacts, including disturbances or conversion of habitat, water pollution during construction, increased noise levels, and an increase in impermeable surfaces. If growth due to implementation of the General Plan Update results in the need for new police service facilities, new projects would be subject to CEQA requirements for environmental assessment, which would allow for the identification and consideration of potential impacts and mitigation, although compliance would not necessarily guarantee that significant impacts would be avoided or mitigated. New facilities would be located consistent with specified land use designations and would be subject to policies in the General Plan Update that would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Policies include those requiring construction BMPs to limit land disturbance, development review to protect significant biological resources, air pollution mitigation measures, promotion of water- and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development.

The Certified EIR concluded that due to the minimal effects that the development of new facilities would have on the environment with compliance with existing regulations and General Plan Update policies, the concentration of new development in areas already served by police protection services, and the addition of policies to address crime potential in the City, the impact of the General Plan Update with respect to police services is considered less than significant.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(iii) Schools?***

As discussed in the Certified EIR, the General Plan Update anticipates the construction of up to 13,710 new potential housing units in the Planning Area by 2040. The General Plan Update projects a very modest growth in Carson public school enrollment by approximately 360 elementary students, 62 junior high school students, and 201 high school students, between 2020 and 2040. No new school facilities are included in the General Plan Update. Although capacity at existing facilities is estimated to be sufficient to accommodate future public school students, demand for new facilities is not based solely on total school capacity but also on the geographic distribution of potential residential growth in relation to the distribution of school capacity. If new residential development occurs where the capacity of nearby schools is limited, new school capacity also may be required.

The construction of new schools or alterations to existing schools could have environmental impacts, including potential disturbances or conversion of habitat, water pollution during construction, increased noise levels, and an increase in impermeable surfaces. The siting of new schools is regulated by the California Department of Education (CDE). The California Education Code contains various provisions governing the siting of new public schools that require school districts to consider potential hazards to school occupants as well as other factors relevant to the public interest prior to the acquisition of a proposed school site. Although in many cases the avoidance or mitigation of hazards to school occupants would reduce impacts to the surrounding environment, the provisions of the California Education Code would not eliminate the potential for all construction-based or operational impacts of a new school.

In the event that the growth anticipated by the General Plan Update results in the need for new or expanded public school facilities, projects would be subject to CEQA requirements for environmental assessment, which would allow for the identification and consideration of potential impacts and mitigation, although compliance would not necessarily guarantee that significant impacts would be avoided or mitigated. New facilities would be located consistent with specified land use designations and would be subject to policies associated with the General Plan Update that would address potential impacts of siting, construction, and operation of new facilities. Policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, air pollution mitigation measures, promotion of water- and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development.

Finally, both the Los Angeles Unified School District (LAUSD) and the Carson Unified School District (CUSD) would continue to collect development impact fees throughout implementation of the General Plan Update, meaning future development would incrementally pay for any needed facility upgrades and expansions. The payment of statutory fees fully mitigates the impacts of development on school facilities for purposes of CEQA per SB 50.

The Certified EIR concluded that given that schools in the Planning Area have sufficient facility capacity to meet projected enrollment needs, that the development of new facilities would have minimal effects on the environment with compliance with existing regulations and the General Plan Update's policies, and that all new development would pay school impact fees, the impact of the General Plan Update with respect to public school facilities is considered less than significant.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(iv) Parks?***

As discussed in the Certified EIR, the General Plan Update would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facilities would occur or be accelerated. In addition, the General Plan Update would not have a significant impact due to inclusion of recreational facilities or required construction or expansion of recreational facilities which might have an adverse physical effect on the environment. As a result, the Certified EIR concluded that the impact of the General Plan Update with respect to park and recreation facilities is considered less than significant.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(v) Other Public Facilities?***

As discussed in the Certified EIR, the anticipated growth associated with implementation of the General Plan Update may have an impact related to other public facilities, such as administrative facilities and libraries. The General Plan Update does not establish precise service standards for these other public facilities; rather, it includes policies that direct the City to provide facilities commensurate with new growth and demographic changes. Should implementation of the General Plan Update result in the need for new public facilities, new projects would be subject to CEQA

requirements for environmental assessment, which would allow for the identification and consideration of potential impacts and mitigation, although compliance would not necessarily guarantee that significant impacts would be avoided or mitigated. New facilities would be located consistent with specified land use designations and would be subject to policies in the General Plan Update. These policies would address potential impacts of siting, construction, and operation of new facilities to the extent assessed in other sections of this EIR. Policies include those requiring construction best management practices to limit land disturbance, development review to protect significant biological resources, air pollution mitigation measures, promotion of water- and energy-efficient construction and landscaping, implementation of noise mitigation measures, and management of archaeological materials found during development. The Certified EIR concluded that due to the minimal effects that the development of new facilities would have on the environment with compliance with existing regulations and General Plan Update policies, the impact of the General Plan Update with respect to public facilities is considered less than significant.

**General Plan Update Policies that Address Public Services**

***Community Services, Education, and Safety***

*Guiding Policies*

CSES-G-1 Work with the Los Angeles Unified School District and other education providers to ensure educational facilities with sufficient permanent capacity are available to meet the needs of current and future projected enrollment. Consult with the school districts on policies and projects that affect the provision of educational facilities and services.

CSES-G-5 Ensure library facilities in the City, and services and programs are adequate and appropriate to meet the community's needs for education and lifelong learning services and as a community gathering space.

CSES-G-6 Promote an adequate and diverse supply of childcare facilities that are affordable and accessible for families, and provide safe, educational, and high-quality services for children.

CSES-G-8 Continue to support and coordinate with the Los Angeles County police and fire services. Implementing Policies

*Implementing Policies*

CSES-P-1 Support efforts by the Los Angeles Unified School District, Compton Unified School District, and childcare service providers to establish, maintain, and improve educational facilities and services to accommodate projected enrollment resulting from the City's population growth and development. The General Plan projects that student enrollment will increase by 622 students and that there is sufficient capacity to meet Carson's existing and future enrollment needs.

CSES-P-5 Monitor library, community, and educational facilities and programs to expand as needed to commensurate with the City's population growth.

CSES-P-6 Coordinate with Los Angeles County Library to provide adequate library facilities and programs that align with the community's learning needs, abilities and demographics, and changes in technology, such as through facility design, services and service delivery methods, and partnerships with educational and learning institutions.

CSES-P-9 Continue to partner with local school districts to optimize the joint-use of school facilities for community use.

CSES-P-13 Work with LASD to develop a Strategic Plan for the Carson Station on approaches to reduce crime, improve response time, maintain staffing needs, increase community collaboration to establish policing priorities, and foster a vibrant and resilient community.

CSES-P-14 Continue to engage the Police and Fire Departments in the development review process to ensure that projects are designed and operated in a manner that minimizes the potential for criminal activity and fire hazards and maximizes the potential for responsive police and fire services.

CSES-P-15 Apply Crime Prevention through Environmental Design principles in the design of new development and encourage the provision of adequate public lighting; windows overlooking streets or parking lots; and paths to increase pedestrian activity within private development projects and public facilities in order to enhance public safety and reduce calls for service.

CSES-P-16 As part of Carson's Public Safety Services Center, continue to employ community-based policing strategies and encourage the establishment of neighborhood watch programs in partnerships with community groups.

CSES-P-25 Coordinate with other jurisdictions and agencies on disaster preparedness regarding heavy industrial uses, including incidents related to the transportation of hazardous materials, pipelines, oil fields, refineries, fires, and methane gas, among others.

CSES-P-34 Continue coordination efforts with the LACFD to ensure their capability to address fires and other emergencies at refineries, tank farms, and other heavy industrial facilities within the City.

**Mitigation Measures**

None required.

### 3.15.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(i) Fire Protection?***

The Los Angeles County Fire Department (LACFD) provides fire protection, emergency medical, and rescue services to residents and businesses within the City, including the Project Site. The Project Site is part of Division 1, Battalion 7 of the LACFD. The nearest LACFD station to the Project Site is Station 36, located at 127 West 223rd Street. The Project Site is within 1.3 "road mile" of this fire station, which would ensure a maximum response time of five minutes or less.

Construction of the Modified Project may generate traffic associated with the movement of construction equipment, removal of demolition and excavation materials, and construction worker trips. Construction activities associated with the Modified Project are not expected to directly block emergency routes since construction would not involve any street closures. Although temporary partial lane closures may be required during construction and slow-moving construction-related vehicles may be present along streets, emergency access would remain available along all

surrounding streets. Emergency vehicles would be able to circumvent slow-moving construction-related vehicles using sirens during emergencies.

The Modified Project would renovate and repurpose the existing City Hall building; remodel the existing Carson Community/Event Center; and develop a new City Hall, a performing arts center, residential uses, retail and restaurant uses, and a hotel. These uses would incrementally increase demand for fire protection services. The Modified Project would be constructed to comply with the requirements of the City's Fire Prevention Code, which requires adequate fire flow for the proposed development, fire prevention and suppression measures, fire access, and a sufficient number of hydrants.

The Modified Project would be designed to accommodate emergency access to and within the Project Site. The proposed driveways and roadways for the Project Site would be designed to meet the minimum width and turning dimensions as required by LACFD. Additionally, all buildings would be constructed to meet the current building code requirements for fire safety. Proposed development on the Project Site would be required to submit project plans to LACFD and incorporate LACFD fire protection and suppression features that are appropriate for the development. Compliance with the City's Fire Prevention Code, the inclusion of LACFD fire suppression measures, and the provision of sufficient fire flow would ensure that operation of the Modified Project would not cause LACFD to expand the existing LACFD fire protection facilities or increase staff levels. Thus, the Modified Project would not increase demand on fire protection services in a manner that would adversely affect LACFD service ratios, response times, or other performance objectives. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would renovate and repurpose the existing City Hall building; remodel the existing Carson Community/Event Center; and develop a new City Hall, a performing arts center, residential uses, retail and restaurant uses, and an entertainment retail center. The Entertainment Retail Option would involve similar types of construction activities as the Modified Project and is not expected to directly block emergency routes since construction would not involve any street closures. Although temporary partial lane closures may be required during construction and slow-moving construction-related vehicles may be present along streets, emergency access would remain available along all surrounding streets. Emergency vehicles would be able to circumvent slow-moving construction-related vehicles using sirens during emergencies.

As with the Modified Project, the proposed uses associated with the Entertainment Retail Option would be constructed to comply with the requirements of the City's Fire Prevention Code and would be designed to accommodate emergency access to and within the Project Site. Development plans would be submitted to LACFD and would be required to incorporate LACFD fire protection and suppression features that are appropriate for the development. Thus, the Entertainment Retail Option would not increase demand on fire protection services in a manner that would adversely affect LACFD service ratios, response times, or other performance objectives, and the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(ii) Police Protection?***

The LASD provides police protection services to residents and businesses within the City, including the Project Site. Carson Sheriff's Station is located at 21356 South Avalon Boulevard. It is situated to the north, across the street from the Project Site.

Construction of the Project would generate traffic associated with haul truck trips to remove demolition and excavation materials, import materials, and construction worker trips. However, construction activities would be temporary and would not involve the closure of an entire street. The Modified Project would not directly block emergency routes. Emergency access would remain available along all surrounding streets. Although temporary partial lane closures may be required during construction and slow-moving construction-related vehicles may be present along streets, emergency access would remain available along all surrounding streets. Police vehicles would be able to circumvent slow-moving construction-related vehicles using sirens during emergencies. Construction of the Modified Project would not trigger the need for new or expanded police protection facilities or increased staff levels.

Development plans would be submitted to the LASD for review and appropriate on-site security features required by LASD would be implemented by the proposed development. On-site security features would reduce the demand on police protection services. Therefore, the Modified Project would not increase demand on police protection services in a manner that would adversely affect Carson Sheriff's Station's service ratios, response times, or other performance objectives. As a result, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would involve similar types of construction activities as the Modified Project. Emergency access would remain available along all surrounding streets during construction, and police vehicles would be able to circumvent slow-moving construction-related vehicles using sirens during emergencies. Development plans would be submitted to the LASD for review and appropriate on-site security features required by LASD would be implemented by the proposed development. On-site security features would reduce the demand on police protection services. Therefore, the Entertainment Retail Option would not increase demand on police protection services in a manner that would adversely affect Carson Sheriff's Station's service ratios, response times, or other performance objectives. As a result, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(iii) Schools?***

The Project Site is located within the Los Angeles Unified School District (LAUSD). Bonita Street Elementary, Andrew Carnegie Middle, and Carson Senior High Schools serve the Project Site.

**Table 3-34** presents total enrollment for the three schools that serve the Project Site in the 2024-2025 school year, along with the enrollment capacity and remaining available capacity of the three schools.

**TABLE 3-34: PUBLIC SCHOOL ENROLLMENT**

| School Name | Total Enrollment 2024-2025 | Enrollment Capacity | Remaining Capacity | Proposed Project Student Generation |
|---|---|---|---|---|
| Bonita Street Elementary School (grades K-5) | 397 | 792 | 395 | 27 |
| Andrew Carnegie Middle School (grades 6-8) | 848 | 1,428 | 580 | 7 |
| Carson Senior High School (grades 9-12) | 1,416 | 1,566 | 150 | 15 |

/a/ Based on LAUSD student generation factor of 0.19142 students per household for grades K-6, 0.05279 students per household for grades 7-8, and 0.10504 students per household for grades 9-12.

**SOURCE:** LAUSD, *Open Data*, https://my.lausd.net/opendata/profile_dashboard?campus_drilldown=true&cost_center_code=1585701&key=1, accessed March 2025; Carson, *Carson 2040 General Plan*, Table 7-1: Public School Enrollment in Carson, adopted April 4, 2023; Los Angeles Unified School District, *2024 Developer Fee Justification Study*, February 2024.

The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause new schools to be constructed. The Modified Project would result in an increase of 140 residential units, which is estimated to generate approximately 49 students to the school districts serving the City (27 new grades K-5 students, 7 new grades 6-8 students, and 15 new grades 9-12 students).[41] As shown in **Table 3-34**, the schools serving the Project Site would have available remaining capacity to serve the Modified Project.

While the Modified Project would also increase the number of employees on the Project Site, employees working on the Project Site are not expected to result in a permanent increase in population since workers from nearby communities are expected to serve the needs of the Modified Project. Nevertheless, it is possible that employees from the Project Site may decide to have their children attend schools that serve the Project Site (rather than from the employees' school of residence), which could potentially increase student population of these schools.

In accordance with California Education Code Section 17620, the applicant of the Modified Project would be required to pay school district fees to LAUSD to fund the construction or reconstruction of school facilities. Pursuant to California Government Code Section 65995(3)(h), the payment of statutory fees "is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization…on the provision of adequate school facilities." Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would develop the same number of residential units as the Modified Project and would result in an increase in the same number of school-age students. As with the Modified Project, the schools serving the Project Site would have available remaining capacity to serve the Entertainment Retail Option. As with the Modified Project, employees associated with the Entertainment Retail Option are not expected to result in a permanent increase

[41]Based on LAUSD student generation factor of 0.19142 students per household for grades K-6, 0.05279 students per household for grades 7-8, and 0.10504 students per household for grades 9-12, as provided in the Los Angeles Unified School District, *2024 Developer Fee Justification Study*, February 2024..

in population since workers from nearby communities are expected to serve the needs of the Modified Project. School district fees would be paid to the LAUSD to fund the construction or reconstruction of school facilities. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(iv) Parks?***

The City's Community Services/Recreation/Park Maintenance Department is responsible for the provision, maintenance, and operation of public recreational and park facilities and services within the City. As discussed in the response to Checklist Question 3.14.2(a), the Modified Project would result in a permanent population increase of 450 people. The population increase would generate direct demand on parks and recreational facilities. The Modified Project would include one or two courtyards in the mixed-use housing development and publicly accessible open space areas on the Project Site.

Although it is possible that employees from the Project Site may use nearby parks and recreational facilities, the additional demand on nearby parks and recreational facilities from are not expected to increase in a manner that would require the need for or the provision of new or physically altered parks and recreational facilities given that the Modified Project includes the provision of open space areas. Additionally, in accordance with Section 11501 of the CMC, the Modified Project would be required to pay development impact fees for parks and related facilities, which would contribute to the funding for land acquisition and infrastructure costs to meet the demand for park space attributed to new development. Any additional park services required as a result of the Modified Project would be mitigated by the applicant paying the development impact fee. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would develop the same types and number of open space areas as the Modified Project, and the Entertainment Retail Option would result in a permanent increase in the same number of people as the Modified Project. The Entertainment Retail Option would be required to pay development impact fees for parks and related facilities in accordance with Section 11501 of the (CMC), which would mitigate any additional park services required as a result of the Entertainment Retail Option. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:***

***(v) Other Public Facilities?***

Potential impacts to roads and transit are discussed in Section 3.17, Transportation, and potential impacts to utilities are discussed in Section 3.19, Utilities and Service Systems.

With regards to libraries, the nearest library to the Project Site is Carson Library, located at 151 East Carson Street, approximately 0.7 mile west of the Project Site. The Modified Project would increase population and employment on the Project Site, which could potentially incrementally increase the demand on library facilities. Carson Library is part of the County of Los Angeles Public Library system, which is financed by property taxes from the service area, general county funds, parcel tax, grants, and funds raised by the Library Foundation. As a result, the Modified Project would contribute to the financing of library services through property taxes, which would mitigate the need for new or physically altered government facilities that support library use. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As with the Modified Project, the Entertainment Retail Option would contribute to the financing of library services through property taxes, which would mitigate the need for new or physically altered government facilities that support library use. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.15.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.15.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.15.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.15.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.16 RECREATION

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **RECREATION**. Would the project: | | | | | |
| (a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | Less Than Significant | No | No | No | No |
| (b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | Less Than Significant | No | No | No | No |

## 3.16.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?*

As discussed in the Certified EIR, a significant amount of new parkland is expected to be added to the existing public parkland inventory, including greenways and parts of redeveloped industrial sites. The Shell property on East Del Amo Boulevard and South Wilmington Avenue is a potential source of new parkland, including an approximately seven-acre greenway and at least 18 acres of community or neighborhood park. Additionally, the General Plan Update proposes some locations for future park additions—consisting of greenways within utility corridors, greenways along the Dominguez Channel, greenway corridors/boulevards, redevelopment of industrial or underutilized commercial sites, and new civic spaces as neighborhood nodes—that will be further refined in a Parks and Recreation Master Plan, as required by policies. Additionally, the City could add more than 180 acres of parkland to its inventory, which exceeds the 84.7 additional acres of parkland that the City would need to meet future demand. Therefore, the General Plan Update would maintain the City's existing parkland ratio of 1.9 acres per 1,000 residents.

The General Plan Update includes provisions to ensure ongoing expansion, investment in, and maintenance of public recreation facilities, thus minimizing substantial physical deterioration of existing or new facilities. Policies provided in the General Plan Update require the identification of funding, as well as development and maintenance of park impact fees, for the expansion and maintenance of parks, trails, and other recreational facilities and programs. The General Plan Update also seeks to develop future recreational facilities, such as by prioritizing the dedication of public parkland as a condition for new residential development, in response to the needs and preferences of the public by soliciting public opinion and ensuring that parks are distributed equitably throughout the City. Furthermore, the addition of new parks and recreational facilities that are proposed or underway—including The Creek at Dominguez Hills, Wishing Tree Park, and Carson Country Mart will help serve residents in the Planning Area, even if they are not counted toward public parkland.

The Certified EIR concluded that given that the General Plan Update would help reduce the likelihood that any existing neighborhood, community, or regional parks, or other recreational

facilities would experience overuse that could result in the physical deterioration of those facilities and that policies are designed to minimize the environmental impact of park and recreational facility development, including the development of design and site planning standards that consider energy and water efficiency, sustainable design elements, and habitat and cultural resource preservation, the impact associated with substantial physical deterioration of park and recreation facilities from increased demand would be less than significant.

***(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

As discussed in the Certified EIR, the General Plan Update anticipates the development of new parks and greenways throughout Carson. In addition, the General Plan Update calls for the continued support and adequate provision of civic spaces and recreational facilities in keeping with the needs and preferences of the population. Should any new recreational facilities need to be constructed in the future, construction of those facilities could result in environmental impacts, including potential disturbances or conversion of habitat, water pollution during construction, increased noise levels, and an increase in impermeable surfaces.

The General Plan Update seeks to develop future recreational facilities in order to meet the anticipated increase in demand due to projected population growth, such as by prioritizing the dedication of public parkland as a condition for new residential development, which will ensure that the City can maintain its existing parkland ratio. The addition of new recreational facilities that are proposed or underway, including The Creek at Dominguez Hills and Carson Country Mart, will also help meet the needs of residents in the Planning Area, even if they are privately-owned spaces and therefore not counted toward public parkland.

New parks and recreational facilities would be subject to CEQA requirements for environmental assessment. Although compliance would not necessarily guarantee that significant impacts would be avoided or mitigated, it would allow for the identification and consideration of potential impacts and mitigation. The precise amount, type, and location of the new parks and recreational facilities would be determined during the planning process for individual development projects or master/specific plans and would be consistent with the land use designations and policies.

Policies—including development of park and recreational facility design and planning standards that consider energy and water use efficiency and sensitive habitat preservation, and incorporate natural and/or drought-tolerant landscaping where reasonable; promotion of sustainable stormwater management through the construction of onsite green infrastructure; and provisions for the construction of infill development and preservation of open space and natural areas—are designed to minimize the environmental impact of development of new parks or recreational facilities.

Therefore, the Certified EIR concluded that the impact associated with the construction or expansion of new recreation facilities would be less than significant with implementation of existing regulations and General Plan Update policies.

**General Plan Update Policies that Address Recreation**

***Recreation and Active Lifestyle***

*Guiding Policies*

RAL-G-1 Maintain a high-quality, diversified park system that reflects Carson's unique attributes and opportunities.

RAL-G-2 Prioritize maintenance, design, and programming of existing facilities to meet the community's evolving needs. Provide addition to the City's existing parkland inventory through strategic park locations as larger sites are developed, and by developing greenways as recreation corridors and linkages to parks.

RAL-G-3 Provide parkland for a comprehensive range of active recreational needs, including sports fields and facilities, and playgrounds, and open spaces for passive recreation.

RAL-G-4 Support habitat creation, greenery, and bioremediation of landfills and industrial sites if redevelopment opportunities arise.

RAL-G-5 Continue cooperative efforts with school districts through joint use agreements for park and recreational facilities.

RAL-G-6 Minimize substitution of private recreation facilities in place of developer fee payment or park dedication to ensure that a public park system will be permanently available to the entire community.

RAL-G-7 Ensure equitable distribution of parks and open space throughout the City and promote safe and accessible connections to accommodate a diversity of ages and abilities

*Implementing Policies*

RAL-P-1 Maintain a community and neighborhood parkland standard of 1.9 acres per 1,000 residents.

RAL-P-2 Coordinate with the Public Works and Parks and Recreation departments to create a connected recreational trail system throughout the City by building out Greenways along major corridors, the Dominguez Channel, and utility rights-of- way, as feasible. This should be in coordination with a Trails Master Plan and Parks Master Plan to create a comprehensive recreational trail system.

RAL-P-3 Consider access, park service levels, and facilities to meet the needs of the community's diverse population in long range park planning, especially in areas targeted for infill and new development.

RAL-P-4 Distribute parks equitably across all areas of the community, with a particular focus on neighborhoods located more than half mile from neighborhood parks. Because the City is built out, future parkland opportunities would largely result from redevelopment of key major sites, which would result from private initiative, and thus the City may not be in position to finely distribute parkland sites so that parkland is fully evenly distributed throughout the community. Nonetheless, the need is particularly greater in neighborhoods that are more than a half mile from any neighborhood park; these areas are shown on Figure 5-3.

RAL-P-5 Strive to locate one or more larger parks in the City's Core – roughly one-mile square area centered on Carson and Avalon Boulevards, given the extensive new housing occurring and planned to occur in this area.

RAL-P-6 Develop and maintain a Parks and Recreation Master Plan or assess community needs and recreation preferences (such as needs of an increasingly aging population, desire for more active recreation such as running and bicycling) and identify priorities for park and recreation space development. The Parks and Recreation Master Plan should include:

- Detailed assessment of park and recreational assets, community needs and preferences (for both active and passive recreation), underserved locations, park usage, and a plan for new park locations, programs, and funding.
- Assessment of needs of special user groups, such as the disabled, the elderly, low-income individuals, and underserved and at-risk youth, and address these in park and recreation facility development.
- Park and recreation access and connectivity, including public transit, bicycle, and walkability.

RAL-P-7 Examine opportunities for inclusion of parks, open space, and greenways or development of passive recreation and habitats as interim uses as part of environmental remediation of industrial sites. This is to be established during site review of redevelopment or site closing plans and will need to be proven safe.

RAL-P-8 When light or heavy industrial areas are redeveloped adjacent to existing residential neighborhoods, a greenway buffer of trees and berms must be provided to help reduce noise, fumes, and aesthetic impacts to the community. If a new residential project is built next to an existing light or heavy industrial use, the greenway buffer shall be included in development plans. Also see the Land Use and Revitalization Element.

RAL-P-9 At sites larger than 20 acres in size that are redeveloped with residential use as a component, require parkland dedication to meet City park standards. Where larger commercial or industrial uses are developed adjacent to residential uses, reserve right to acquire parkland or through a public/private partnership to fulfill City parkland needs.

RAL-P-10 When planning Greenways, locate trail rights-of-way with consideration for safety, privacy, convenience, preservation of natural vegetation and topography, and impact on neighboring properties, and work with landowners on development proposals to incorporate and provide for a continuous multiuse trail system.

RAL-P-11 Create a Greenway along the Dominguez Channel estuary that includes biking, walking, green space, lineal parks, and pocket parks. This will provide both a local and regional amenity and serve as a multimodal transportation system and provide community linkages and connectivity. Work with public agencies and private entities for development and maintenance of trails in other rights-of-way and utility corridors.

RAL-P-12 Continue and seek partnerships with schools, Cal State Dominguez Hills, and private entities to establish joint usage of parks and facilities, enhance parkland provision and availability, and provide additional recreational opportunities for Carson residents.

RAL-P-13 Seek available state and federal grant assistance in implementing the parks and open space proposals of the General Plan.

RAL-P-14 Under a private/private partnership, support development of Civic Spaces in community nodes to foster new active gathering spaces.

***Community Character and Design***

*Implementing Policies*

CCD-P-6 Prepare a Greenway Corridors and Streetscape Plan to prioritize the development of streetscapes in Greenway Corridors (illustrated in Figure 4-5; additional street segments not shown in this figure may be included), in coordination with other City streetscape design and pedestrian realm improvement initiatives. The Plan should:

a. Foster development of Greenway Corridors as tree-lined boulevards emphasizing:
   - Consistent species and regularly-spaced trees that promote street identity;
   - Closely spaced canopy trees in and around neighborhood centers to provide adequate shade;
   - Stormwater management through bioswales or rain gardens.
   - Wider sidewalks, with considerations for those that are mobility impaired;
   - Corner sidewalk bulb-outs, highly visible pedestrians crossings, and pedestrian safety islands where appropriate.
   - Bikeways, as shown in Carson 2040 General Plan Figure 3-3 and updated citywide Bicycle Master Plan when developed; and
   - Pedestrian-scaled and attractive lighting, benches and other street furniture, and signage.

b. Grow the tree canopy by maintaining existing trees and planting additional street trees where feasible. Develop regulations for tree canopy coverage of surface parking areas that are appropriate to use and location.

c. Prioritize Greenway Corridors in high-activity areas, such as within the Core and along the residential neighborhoods, active commercial areas, Neighborhood Villages, or major transportation corridors.

***Community Health and Environmental Justice***

*Implementing Policies*

CHE-P-29 Seek to plant tree species that balance sustainability and heat mitigation potential such as those that are drought-tolerant, pest-resistant, and maximize shade.

**Open Space and Environmental Conservation**

*Guiding Policies*

OSEC-G-1 Maintain a balanced and integrated open space system reflecting a variety of considerations—resource conservation, production of resources, recreation, and aesthetic and community identity—and ensuring synergies between various open space components and compatibility with land use planning.

OSEC-G-2 Seek opportunities for the restoration of natural open space during redevelopment of industrial or remediated landfills—including land currently used to produce resources—to create open space that supports outdoor recreation, protects public health and safety, and improves plant and animal habitat.

OSEC-G-3 Support efforts to improve the biodiversity of plant and animal habitats within Carson by creating natural habitat areas when feasible. Support efforts to restore channelized creeks to naturalized flows, with supportive open space development that promotes healthy riparian habitat.

*Implementing Policies*

OSEC-P-7 Provide ongoing education for property owners, businesses, and developers regarding landscape, maintenance and irrigation practices that promote habitat creation for wildlife species and improving the urban forest.

**Mitigation Measures**

None required.

### 3.16.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

As discussed in the response to Checklist Question 3.15.2(a.iv), the population increase of up to 450 persons as a result of the Modified Project would generate direct demand on parks and recreational facilities. Residents of the Modified Project would also use nearby City parks and other public and regional parks. According to the Los Angeles Countywide Comprehensive Parks and Recreation Needs Assessment, the City has approximately 141.6 acres of existing parks and recreational facilities and a ratio of 1.5 park acers per 1,000 residents.[42] The Modified Project would develop open space areas on the Project Site that are publicly accessible. The Modified Project would also provide courtyards that are accessible to residents of the proposed mixed-use housing development and could be used for recreational activities. The Modified Project would contribute to the amount of open space areas assessable to the public and the amount of recreational areas accessible to the residents of the Modified Project. Thus, the increased use of existing public park facilities by residents of the Modified Project would not be at a level that would result in physical deterioration of existing parks and other recreational facilities and would not require the need for new or physically altered facilities.

The Modified Project would be required to pay development impact fees in accordance with Section 11501 of the CMS, which would contribute funding for park facilities. Any additional park services required as a result of the Modified Project would be mitigated by the applicant paying the development impact fee. Thus, the Modified Project would not substantially increase the use of existing neighborhood and regional parks or other recreational facilities that would cause or accelerate adverse deterioration of existing parks and recreational facilities. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would result in a permanent increase in the same number of people as the Modified Project. It would develop the same types and number of open space areas as the Modified Project. The Entertainment Retail Option would be required to pay development impact fees for parks and related facilities in accordance with Section 11501 of the CMS, which would mitigate any additional park services required as a result of the Entertainment Retail Option. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?***

The Modified Project would develop publicly accessible open space areas on the Project Site and would also develop courtyards that are accessible to residents of the proposed mixed-use housing development. The open space areas could be used for recreational activities. The potential environmental effects associated with the construction and operation of proposed on-site open space areas have been evaluated throughout this Addendum as part of the Modified Project. As

[42]County of Los Angeles, *Los Angeles Countywide Comprehensive Park & Recreation Needs Assessment, Appendix A: Study Area Profiles*, May 9, 2016, https://lacountyparkneeds.org/wp-content/root/FinalReportAppendixA/StudyArea_161.pdf, accessed September 2025.

discussed throughout this Addendum, the Modified Project, including the proposed on-site recreational areas, would not have an adverse physical effect on the environment. Additionally, the Modified Project would be required to pay development impact fees, which would contribute funding for public parks facilities. Any additional park services required as a result of the Modified Project would be mitigated by the applicant paying the development impact fees. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would develop the same types and number of open space areas as the Modified Project. As with the Modified Project, the construction of open space areas on the Project Site would not have an adverse physical effect on the environment. Any additional park services required as a result of the Entertainment Retail Option would be mitigated by the applicant paying the development impact fees. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.16.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.16.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.16.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.16.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.17 TRANSPORTATION

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **TRANSPORTATION**. Would the project: | | | | | |
| (a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | Less Than Significant | No | No | No | No |
| (b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)? | Less Than Significant | No | No | No | No |
| (c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | No Impact | No | No | No | No |
| (d) Result in inadequate emergency access? | No Impact | No | No | No | No |

## 3.17.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

As discussed in the Certified EIR, implementation of the General Plan Update would improve connections to local and regional transit service and encourage the use of alternative modes of transportation, including walking and biking through supportive land use development. The Planning Area contains existing non-vehicular transportation, such as pedestrian and bicycle facilities and transit services.

The roadway network in Carson is considerably built out, such that no roadway capacity improvements (lane additions, lane widening, medians) are that would change the functional classification of the roadway network. The General Plan Update implements multi-modal network goals and policies to calm traffic, install and improve bike lanes, and improve public transportation services.

Implementation of the General Plan Update would enable the City to improve bicycling programs and infrastructure throughout the City, providing connections to the existing and bicycle network. Implementation of General Plan Update would also improve pedestrian infrastructure by providing existing and planned pedestrian facilities and prioritizing pedestrian safety.

New trips and increased VMT may affect the operation of existing transit services or routes. Several policies and goals included in the General Plan Update address these impacts by balancing the multimodal transportation network to provide alternatives to the automobile, improving transit service connections, and encouraging the use of alternative modes of transportation to minimize the potential for negative effects. The Certified EIR concluded that based on the availability of nonvehicular transportation options for the community outlined above and the Circulation Goals and policies provided in the General Plan Update, the plan would not conflict with any applicable

program, plan, or ordinance on the circulation system, including transit, roadway, bicycle, and pedestrian facilities and the impact would be less than significant.

***(b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?***

Land use and corresponding socioeconomic data forecasts were developed for the General Plan Update, and the SCAG model was subsequently updated to reflect General Plan Update assumptions. Then, the SCAG model was run to develop VMT estimates for the buildout of the General Plan Update. Under Existing/Baseline Conditions, the Planning Area comprises a service population of 199,149 (total number of residents and employees) and generates 7,867,557 daily total VMT, including private automobiles and trucks. This results in Baseline VMT metrics of 39.5 VMT per service population, 14.3 Home-Based VMT per capita for residential land uses, and 20 Home-Based Work VMT per employee for employment-generating land uses.

Under Cumulative Base (2040 No Project) Conditions, the Planning Area is estimated to comprise a service population of 221,195 and generate 8,405,911 daily total VMT. This results in estimates of 38 VMT per service population, 12.7 Home-Based VMT per capita for residential land uses, and 16.2 Home-Based Work VMT per employee for employment-generating land uses. Under Cumulative Plus Project (2040) Conditions, total VMT increases are compared to the 'Without Project" scenario to reflect additional development in the City of Carson. The Planning Area is estimated to comprise a service population of 255,130 and generate 9,505,005 total daily VMT, which results in estimates of 37.3 VMT per service population, 12.4 Home-Based VMT per capita for residential land uses, and 16.0 Home-Based Work VMT per employee for employment-generating land uses.

The City has established the following significance threshold for VMT transportation impacts for land use plans:

- Plan exceeds 15 percent below City plus SOI Baseline VMT for total VMT per service population, residential VMT per resident, and employee VMT per employee

To determine if the Project would result in a transportation impact, the following steps were taken:

- The General Plan Update was compared with the SCAG RTP/SCS for consistency.
- If consistent, that may support a finding of less-than-significant impact if the change from the existing baseline VMT to the Plus Project VMT demonstrates a 15 percent reduction in total daily VMT per service population, a 15 percent reduction in daily Home-Based VMT per capita, and a 15 percent reduction in Home-Based Work VMT per employee. Therefore, these metrics were estimated and compared.
- For informational purposes, a comparison of 2040 No Project and 2040 Plus Project is also provided to help the public and stakeholders understand how development under the General Plan Update would affect travel patterns relative to the currently adopted plan.

The Home-Based Work VMT per employee is estimated to be 15 percent or more below the Baseline VMT and would, therefore, not result in a significant impact. However, total VMT per service population and Home-Based VMT per capita are not 15 percent or more below the Baseline VMT, indicating a significant impact for these metrics.

All three VMT metrics perform better than the City's Baseline (approximately 6 to 20 percent better). However, the state's guidance and the City's VMT significance thresholds require the VMT metrics to perform at least 15 percent better than the City's baseline average in order to result in a less-than-

significant impact. As such, the following project features were evaluated to assess their potential benefits for reducing total VMT per service population:

1. Implementation of Bike Improvements: The City is expanding its bicycle and pedestrian networks as proposed in the City's Master Plan of Bikeways and the existing General Plan. These bike improvements were examined since VMT reduction benefits are likely to accrue once the supporting infrastructure is available. As discussed in its latest handbook for analyzing GHG emission reductions, the California Air Pollution Control Officer's Association (CAPCOA) found that strategies involving bikeway improvements or installations can achieve from 0.2 percent to 0.8 percent VMT reduction based on how extensive the improvements are. The City is already designing or implementing the bikeway improvements. Using guidance provided by CAPCOA, the implementation of these improvements was estimated to result in a 0.35 percent VMT reduction. This percent reduction can be applied at the community-level to all trips as per CAPCOA guidance.

2. Bikeshare program: After the bicycle improvement projects discussed above are implemented, a bikeshare system could be promoted. VMT reduction benefits from bikeshare available from CAPCOA are estimated to provide about 0.02 percent to 0.06 percent VMT reduction benefits for pedal and electric bikeshare programs, respectively. Since potential reductions are relatively small, no VMT reductions are being applied for this feature.

3. Telecommuting Options: Potential VMT reductions could result from the encouragement of telecommuting and alternative work schedules in the City. In the CAPCOA handbook, these reductions are available through trip reduction programs and are typically led by employers and could be achieved through a variety of approaches, such as strategies or mandates implemented by local authorities. Flexible work policies that allow employees to work part-time or full-time from home are becoming more common due to a variety of factors such as COVID-19, access to childcare, advances in technology, and more employers offering this option.

Prior to the COVID-19 lockdown, national trends in working from home showed a mixed picture that varied depending on the survey and measures used. The annual U.S. Census Bureau American Community Survey presents patterns of full-time work at home only, which has increased at a gradual pace from 3.6 percent in 2005 to 4.3 percent in 2010, and 5.2 percent in 2017 for the nation. The same picture is present in our region of focus. Between 2013 and 2016, Los Angeles County full-time rates remained at 5.6 percent. The decennial National Household Transportation Survey (NHTS) provides more detail on both part- and full-time flexible workplace practices, including work at home, flexible start times, self-employment, and work locations. According to NHTS data, the percentage of workers who indicated they were eligible to work from home has increased over time from 10 percent in 2001, to 13 percent in 2009, and to 18 percent in 2017. The increase is more pronounced in Los Angeles, where 16 percent of workers had the option in 2009 and around 40 percent had the option in 2017.

World Economic Forum documents numerous studies, both academic and corporate, that establish the prevalence of flexible work policies today and its popularity and value to the workforce going forward. A recent University of California, Davis study on effects of COVID-19 on mobility in the SCAG region documents that "the percentage of hybrid workers continually increased, from 14.4 percent of all respondents pre-pandemic to 29.6 percent in summer 2021 and is expected by respondents to continue increasing through summer 2022." The study authors also hint at the future of telework by stating that "sustained high adoption rates and frequency of remote work, and the expectation among respondents that they would be able to continue to work from home (including partial telework) in the future, highlight the current (and potential future) persistence of hybrid forms of work." This persistence in flexible work practices is also documented in a recent study in the South Bay cities region.

Since telecommuting trends are more pronounced for certain jobs, the potential VMT reductions were examined by considering the City's employment mix. According to 2021 data from the U.S. Census Bureau, more than 16 percent of Carson's population is employed in employment categories that are amenable to telecommuting, including Management, Business and Finance, Computer and Mathematical, and Architecture and Engineering. The SCAG 2040 baseline model includes an assumed TDM factor of 17 percent for the SCAG region. To provide a more conservative analysis, this factor was adjusted downward to 12 percent. Given the persistent trends in flexible work and improvements in transit alternatives, a TDM factor of 12 percent was applied. This VMT reduction can be applied at the community-level.

Based on the analysis described above, the City is estimated to mitigate its total VMT by 244,490, Home-Based VMT by 43,978, and home-based work VMT by 44,232 miles. This would result in 36.3 total VMT per service population, 12.1 Home-Based VMT per capita, and 15.6 Home-Based work VMT per employee. With implementation of the measures described above, VMT impact associated with Home-Based VMT per capita would be mitigated as 12.1, which is lower than the threshold value of 12.2 Home-Based VMT per capita. The impact associated with total VMT per service population would remain, thus, resulting in a conflict with CEQA Guideline Section 15064.3, Subdivision (b). The Certified EIR concluded that this impact would be significant and unavoidable.

***(c) Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

As discussed in the Certified EIR, the General Plan Update does not specify design features for the transportation system in the Planning Area and would thus not substantially increase hazards due to a design feature. Impacts regarding the potential increase of hazards due to a geometric design feature generally relates to the design of access points to and from the Planning Area and may include safety, operational, or capacity impacts that must be assessed. Given the programmatic nature of the General Plan Update, these are evaluated at the program/citywide level.

The land use diagram and policies contained in the General Plan Update emphasize transition areas and buffers between land uses of varying intensity, which would serve to reduce potential conflicts between users of the transportation system connected with each land use, including commercial and industrial truck traffic, commute traffic, pedestrians, and cyclists. The specific design and operations of individual future development projects are unknown at this time; however, policies included in the General Plan Update would serve to reduce potential impacts from future development.

Access locations for development allowed under the General Plan Update would be designed to the City's standards and would provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls to meet the City's requirements to protect pedestrian safety. The installation of street trees and other potential impediments to adequate driver and pedestrian visibility in the public right-of-way would require review for sight distance and be designed to City standards and best practices to avoid obstructions. Pedestrian entrances separated from vehicular driveways would provide access from the adjacent streets. The General Plan Update has been developed with an emphasis on multi-modal street networks, which would improve compatibility between different transportations modes and between the transportation system and adjacent land uses. Policies that promote bicycle and pedestrian safety would help identify and address potential safety concerns.

As a result, the Certified EIR concluded that the General Plan Update would not substantially increase hazards due to a geometric design feature or incompatible use, and this impact is considered less than significant.

### *(d) Would the Project result in inadequate emergency access?*

As discussed in the Certified EIR, the General Plan Update is presented at a programmatic level. Emergency accessibility is typically assessed at a project level. Project-level review required by the City includes site access review for emergency vehicles and traffic control plans that account for emergency vehicles. As stated above, future development under the General Plan Update would be compliant with the City's design guidelines that incorporate safety and emergency access needs, where applicable. The City's development review process would ensure that future development under the General Plan Update would be consistent with these policies and not hinder emergency access for individual sites. The Certified EIR concluded that for these reasons, the General Plan Update would not result in inadequate emergency access, and this impact is considered less than significant.

**General Plan Update Policies that Address Transportation**

***Circulation***

*Guiding Policies*

CIR-G-1 Provide a balanced transportation system of multimodal networks providing a broad range of travel options to make transportation convenient, comfortable, and safe for people of all abilities.

CIR G-2 Promote bicycling and walking, and support and improve connections to local and regional transit service.

CIR G-3 Manage the transportation network to minimize roadway congestion, while balancing traffic Level of Service (LOS) objectives with promoting reduction in vehicle miles traveled and considerations of community character and design.

CIR-G-4 Encourage the development of a multimodal freight transportation system that balances the need for effective and efficient transportation of goods with the health and wellbeing of the community.

*Implementing Policies*

CIR-P-1 Update the City's Bicycle Plan, identifying a citywide bicycle network of off-street bike paths, on-street bike lanes and bike streets. As part of the plan, consider bicycle lockers, secure bike parking, pavement condition, and access to transit, parks, and schools throughout the City. The update of the Bicycle Plan should strategically identify projects that will improve equity, the environment, reduce trips on the roadway system, and prioritize projects that align with primary local active transportation grant funding programs including Metro, SCAG, and Caltrans.

CIR-P-2 Develop a First Last Mile Plan to improve walking and biking connections to future and existing transportation hubs.

CIR-P-3 Establish bike hubs (centralized locations with convenient bike parking for trip destinations or transfer to other transportation modes) at key transit nodes or commercial nodes.CIR-P-8. Develop and implement street design standards on arterial corridors that are context sensitive to adjacent land uses or districts, and to all roadway users. Require large new developments and redevelopment projects to provide interconnected street networks with small blocks.

CIR-P-5 Work with the school district and private schools to improve pedestrian and bicycle routing and safety around schools. Focus pedestrian access to the elementary schools and bicycle and pedestrian access to the middle and high schools.

CIR-P-7 Create and update a Local Road Safety Plan (LRSP) which Caltrans offers grants to develop, create, and administer Vision Zero policies to prioritize safety of all roadway users.

CIR-P-10 Direct commuter traffic to move through the City primarily on arterial streets, and on collector streets as appropriate. Consider traffic calming strategies.

CIR-P-16 Work with Long Beach Transit to serve local neighborhoods and connect residences with shopping, employment, transit, and recreational opportunities.

CIR-P-17 Participate in and encourage collaboration among adjacent cities to provide a more reliable public transportation system the area.

CIR-P-18 Work with transit services to provide attractive and convenient bus stops, including shade/weather protection, seats, transit information, and trash receptacles.

CIR-P-19 Work with regional transit services to develop an on-demand transportation system that caters to senior populations and people with disabilities.

CIR-P-20 Evaluate and adjust transit routes to better connect disadvantaged communities with major transit hubs and key destinations such as parks, schools, and healthy food opportunities.

CIR-P-21 Work with transit providers in the City to implement public transportation improvements and enhance first-last mile connections at highly utilized transit stops.

CIR-P-22 Develop a transportation demand management (TDM) ordinance. A TDM ordinance would incorporate strategies appropriate for the local context and land use as different strategies are more effective at reducing employee commute trips, while others focus on reducing residential, shopping, or other discretionary trips. Strategies will generally focus on land use, parking, transit, and active transportation.

CIR-P-23 Pursue the implementation of TDM strategies through application of the City's Transportation Study Guidelines and compliance with Senate Bill 743 that seeks to reduce per capita VMT for residential, retail, and office trips.

CIR-P-24 Encourage local public agencies and employers to implement TDM policies that promote VMT reductions. The research in this area is regularly evolving and can help identify viable and defensible VMT reduction strategies.

CIR-P-25 Evaluate the potential for strategies that can reduce VMT such as citywide bike-sharing, promote car-sharing and other electrified modes as options to reduce traffic congestion.

CIR-P-26 Prioritize and identify disadvantaged community locations to develop sustainable mobility hubs that include car-sharing, bike-sharing and public EV charging infrastructure to minimize traffic and air quality effects.

CIR-P-28 Focus truck traffic onto appropriate arterial corridors in the City by clearly marking truck routes and posting appropriate signage to provide for the effective transport of goods while minimizing negative impacts on local circulation and noise-sensitive land uses.

While the City has identified truck routes (Fig 3-8), the designation of truck routes does not prevent trucks from using other roads or streets to make deliveries to individual addresses. Seeking community input around the issue and general observation of traffic patterns as online shopping and associated deliveries increase in the future will help in developing strategies to reduce use of non-designated corridors and limit disruption and potentially regulate truck movement.

CIR-P-29 Retain and strengthen ordinances restricting trucks from residential neighborhoods, using strategies such as time-of-day restrictions.

CIR-P-30 Develop curb management strategies to accommodate growing loading needs of on-demand food and goods delivery services.

**Mitigation Measures**

None required.

### 3.17.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

#### *(a) Would the Project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

As previously discussed in the response to Checklist Question 3.11.2(b), the Modified Project would be consistent with Connect SoCal 2024. The Modified Project's strategies for mixed-use development allow multiple land uses to work together to reduce vehicle trip lengths. Connect SoCal is updated every four years and it is anticipated that the City will work with SCAG to update Connect SoCal so that the Modified Project would maintain consistency with Connect SoCal. CARB's 2016 Mobile Source Strategy recognizes that coordinated regional planning can improve California's land use patterns and transportation policy in a way that reduces transportation related emissions by reducing VMT growth.

The planned transportation network associated with the Modified Project is consistent with the City's General Plan Update Circulation Element, which includes street classifications, proposed bike facilities, and transit routes. As such, the Civic Center Specific Plan is consistent with programs, plans, ordinances and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities.

Carson Street is a designated Class III (sharrows) bike route. The City's Master Plan of Bikeways proposes that the Class III bike route on Carson adjacent to the Project Site have pavement markings to indicate to indicate the travel lane that is to be shared among motorists and bicyclists. The City's Master Plan of Bikeways also identified three options for Avalon Boulevard adjacent to the Project Site: reduce Avalon Boulevard from six lanes to four lanes and add six-inch colored bike lanes with a four-foot buffer, add four-foot bike lanes, or add sharrows and wayfinding signage. The Modified Project would improve Carson Street adjacent to the Project Site with new paving. To ensure that the new paving and the roadway configurations of Carson Street and Avalon Boulevard would not preclude the bikeways proposed in the City's Master Plan of Bikeways, **Mitigation Measure TRA-1** shall be implemented.

The Modified Project would be consistent with Connect SoCal 2024 and the City's General Plan Update Circulation Element. Additionally, with implementation of **Mitigation Measure TRA-1**, the Modified Project would be consistent with the City's Master Plan of Bikeways. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option involves the same planned transportation network as the Modified Project. As with the Modified Project, the Entertainment Retail Option would be consistent with Connect SoCal 2024 and the City's General Plan Update Circulation Element. Additionally, with implementation of **Mitigation Measure TRA-1**, the Entertainment Retail Option would be consistent with the City's Master Plan of Bikeways. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(b) Would the Project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b)?***

The City currently evaluates VMT impacts of land use plans using the following thresholds of significance:

- A land use plan would be considered to result in a significant impact if the VMT rate for the land use plan would exceed 15 percent below the applicable baseline VMT rate (defined as the City of Carson per applicable service population).

This threshold was applied to evaluate the potential transportation impacts of the Modified Project. Since the project includes residential and non-residential land use, VMT per service population (i.e., residents plus jobs) was used as the analysis metric. Using the SCAG Activity-Based Model, citywide VMT outputs were prepared for an Existing and Existing Plus Project scenario. The land uses proposed for the Modified Project were included in the Existing Plus Project scenario. In addition, the Modified Project includes multiple strategies to reduce vehicle trips and VMT. These strategies include the following:

- Transportation Demand Management strategies
- Increased transit ridership and frequency via a new bus depot on the site
- Increased land use density
- Reduced residential parking requirements
- Pedestrian network improvements
- Integrating affordable housing
- Bicycle Parking

To account for these strategies in the Existing Plus Project scenario, off-model adjustments were prepared using guidance from the California Air Pollution Control Officers Association *Handbook for Analyzing Greenhouse Gas Emission Reductions Assessing Climate Vulnerabilities and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers*. **Table 3-35** summarizes the daily citywide VMT per service population under Existing and Future Year 2050 conditions. The detailed VMT calculations are provided in Appendix C of this Addendum.

As shown in **Table 3-35**, existing citywide VMT per service population is currently 15.50, which exceeds the City's threshold of 13.17 (i.e., 15 percent below 15.50) per the City's guidelines. The Existing Plus Modified Project VMT per service population including the land uses associated with the Modified Project is forecasted to be 15.24. The Existing Plus Modified Project scenario VMT per service population is forecasted to improve compared to the existing citywide VMT per service population. However, the Modified Project is still forecasted to exceed the City's CEQA threshold of 13.17.

**TABLE 3-35 : MODIFIED PROJECT VMT SUMMARY**

| Scenario | Total Home-Based Daily VMT | Total Work-Based Daily VMT | Total Daily VMT | Service Population /a/ | VMT/Service Population |
|---|---|---|---|---|---|
| **Existing Scenario** | | | | | |
| Existing | 1,543,781 | 947,055 | 2,490,836 | 160,708 | 15.50 /b/ |
| Existing Plus Modified Project | 1,532,293 | 936,792 | 2,469,084 | 162,037 | 15.24 |
| Existing Plus Entertainment Retail Option | 1,535,625 | 937,170 | 2,472,796 | 162,223 | 15.24 |
| **Future 2050 Scenario** | | | | | |
| Future 2050 Without Modified Project | 1,403,904 | 736,700 | 2,140,604 | 168,996 | 12.67 /c/ |
| Future 2050 With Modified Project | 1,400,594 | 745,455 | 2,146,049 | 170,325 | 12.60 |
| Future 2050 With Entertainment Retail Option | 1,403,640 | 745,756 | 2,149,396 | 170,511 | 12.61 |

**Note:** Daily VMT, service population, and VMT/service population are citywide.
/a/ Service population equals to the total of residents and employees.
/b/ Significant impact threshold is 15 percent below Existing scenario, which is equal to 13.17.
/c/ Significant impact threshold is 15 percent below Future Year 2050 Without Project, which is equal to 10.77.
**SOURCE:** Iteris, *Carson Civic Center Specific Plan – Draft CEQA Transportation Impact Analysis*, November 26, 2025, Appendix C.

Similarly, Future Year 2050 VMT per service population is forecast to be 12.67, which would also exceed the City's threshold of 10.77 for year 2050. Future Year 2050 with Modified Project VMT per service population is forecast to be 12.60. Although Future Year 2050 VMT per service population would improve compared to existing citywide VMT per service population, the Modified Project is still forecasted to exceed the City's CEQA threshold of 10.77 for Future Year 2050.

This significant impact is consistent with the significant and unavoidable impact identified for the General Plan Update in the Certified EIR and, thus, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### Entertainment Retail Option

The proposed retail, restaurant, and immersive entertainment uses associated with the entertainment retail center at the Hotel/Entertainment Retail Parcel would consist of a larger number of employees than the proposed hotel use from the Modified Project, resulting in a larger daily trip generation. All other uses on the project site would remain the same as the Modified Project. The immersive entertainment use has the potential to be a regional draw, resulting in longer trip distances. As shown in **Table 3-35**, the Existing Plus Entertainment Retail Option VMT per service population is forecasted to be 15.24, and the Future Year 2050 with Entertainment Retail Option VMT per service population is forecasted to be 12.61, both of which are similar to the Modified Project and would exceed the City's CEQA threshold of 13.17 for Existing year and 10.77 for Future Year 2050. Therefore, the Entertainment Retail Option is anticipated to result in a similar significant and unavoidable impact as the Modified Project and the General Plan Update analyzed in the Certified EIR. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

The Modified Project involves improvements and modifications to the transportation facilities within and adjacent to the Project Site. These improvements and modifications include removing Civic Center Drive and replace it with a New Street, removing or reconstructing the existing pedestrian bridge over Civic Center Drive, providing new paving along the Carson Street right-of-way, widening the sidewalk on the north side of Carson Street, providing new crosswalks at the Avalon Boulevard/Carson Street intersection, and providing a new mid-block crossing on Carson Street near the front entry of the new City Hall building. The New Street would continue to connect Desford Street to Carson Street, and the existing pedestrian bridge would be replaced with an east-west pedestrian pathway that would connect the proposed Jewel Plaza to the eastern end of the Project Site. The proposed improvements and modifications would make the Project Site and its adjacent area more pedestrian friendly and would improve pedestrian safety and mobility.

Any proposed roadway modifications would be designed to City and state engineering design standards to meet sight distance requirements, including visibility of pedestrians and bicyclists. Additionally, the Modified Project would not introduce incompatible uses that would increase hazards. The Modified Project design would be reviewed by the City's Community Development Department, which includes the Planning Division and Building and Safety Division, the Public Works Department, and LACFD during the plan review process to ensure all applicable requirements are met. Therefore, the Modified Project would not substantially increase hazards due to geometric design features or incompatible uses. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option involves the same planned transportation network as the Modified Project. As with the Modified Project, the proposed improvements and modifications to the transportation facilities within and adjacent to the Project Site would be designed to City and state engineering design standards to meet sight distance requirement. The Entertainment Retail Option would be reviewed by the City's Community Development Department, which includes the Planning Division and Building and Safety Division, the Public Works Department, and LACFD during the plan review process to ensure all applicable requirements are met. Additionally, the Entertainment Retail Option would not introduce incompatible uses that would increase hazards. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project result in inadequate emergency access?***

The Modified Project would be designed to allow adequate emergency access to the Project Site in accordance with the City's driveway standards and LACFD requirements. Additionally, the proposed driveways would be designed to meet the minimum width and turning dimensions as required by the LACFD. Construction of the Modified Project may involve temporary lane closures; however, emergency vehicles would still be able to travel along these roadways and access to all surrounding properties would be maintained.

As previously discussed in the response to Checklist Question 3.9.2(f), during operations of the Modified Project, special events on Carson Street between Avalon Boulevard and Bonita Street/Civic Plaza Drive may involve this segment of the street to temporarily close, which would block access to the mobile home community, child development center, and medical offices and urgent care on the south side of Carson Street. It is the policy of the City's Public Works Department that street and lane closures are not longer than 72 hours. To ensure that all properties along Carson Street are

accessible in the event of an emergency, the Sheriff's Station, City's Transportation Division, and Fire Department would review the street and lane closures requests and ensure that street closures for special events would not interfere with emergency access on the Project Site and in the surrounding area. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option.**

As with the Modified Project, the Entertainment Retail Option would be designed to allow adequate emergency access to the Project Site in accordance with the City's driveway standards and LACFD requirements. Emergency vehicles would still be able to travel along adjacent roadways and access all surrounding properties should temporary lane closures occur during construction. Although special events may involve temporary closure of Carson Street between Avalon Boulevard and Bonita Street during operations of the Entertainment Retail Option, the temporary street closures would be reviewed by the Sheriff's Station, City's Transportation Division, and Fire Department to ensure that temporary street closures for special events would not interfere with emergency access on the Project Site and in the surrounding area. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Mitigation Measures**

**TRA-1** The paving and configuration of Carson Street and Avalon Boulevard shall account for the planned bikeways in the City's Master Plan of Bikeways. As identified in the Master Plan of Bikeways, type B sharrows (i.e., pavement markings to specify the sharrows) are planned along Carson Street between Avalon Boulevard and I-405. The Master Plan of Bikeways identified three options for Avalon Boulevard between the I-405 southbound ramps and Carson Street:

- Option 1: Road diet to 4 lanes; add 6 inch colored bike lanes with 4-foot buffer.
- Option 2: Add 4-foot bike lanes.
- Option 3: Add sharrows and wayfinding signage.

### 3.17.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what was identified in the Certified EIR.

### 3.17.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.17.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.17.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.18 TRIBAL CULTURAL RESOURCES

| Issues (and supporting Information Sources) | Impact Determination in Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impacts or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **TRIBAL CULTURAL RESOURCES**. Would the project cause a substantial adverse change in the significance of a Tribal Cultural Resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:: | | | | | |
| (a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k)? | Less Than Significant With Mitigation | No | No | No | No |
| (b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | Less Than Significant With Mitigation | No | No | No | No |

## 3.18.1 IMPACT DETERMINATION IN THE EIR

***(a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, please, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k); or***

***(b) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, please, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

As discussed in the Certified EIR, future development proposals initiated under the General Plan Update that include ground-disturbance activities (e.g., excavation, trenching, boring, grading, drilling, demolition, clearing/grubbing, etc.) have the potential to cause a substantial adverse change to tribal cultural resources as defined by PRC Section 21074. Specifically, anticipated development in the Planning Area would occur through infill development on vacant property, and

through redevelopment or revitalization of underutilized properties, which could result in damage to tribal cultural resources as a result of construction-related ground disturbance. In addition, infrastructure and other improvements requiring ground disturbance could result in damage to or destruction of tribal cultural resources buried below the ground surface. Future development that results in changes to the setting through incompatible adjacent construction or facilitates public access to culturally significant sites could result in additional impacts to tribal cultural resources. Future development that does not require ground-disturbing activities would cause no impacts on tribal cultural resources. The Native American Heritage Commission (NAHC) Sacred Land File (SLF) search for the City yielded negative results. The City submitted notification and request to consult letters to five Native American individuals and organizations on March 29, 2021, pursuant to AB 52 and to seven Native American individuals and organizations on March 29, 2021, pursuant to SB 18. On April 5, 2021, the City received a letter from Chairman Salas of the Gabrieleño Band requesting consultation. The City set up a consultation call for October 7, 2021. However, the Gabrieleño Band reached out to the City via email prior to the meeting and indicated that since the Project is a General Plan Update with no ground disturbance proposed, they do not need to consult. To date, no other responses from the Native American community have been received as part of the AB 52 nor SB 18 tribal consultation effort.

In summary, no tribal cultural resources were identified within or adjacent to the Planning Area. However, there are unevaluated prehistoric resources within the Planning Area that could be potential tribal cultural resources and given the historic occupation of the Planning Area, it is possible that future development within the Planning Area may result in the identification of unrecorded tribal cultural resources. Future projects would be required to comply with the provisions of SB 18 and AB 52 to incorporate tribal consultation into the CEQA process to ensure that tribal cultural resources are properly identified and that mitigation measures are identified to reduce impacts on these resources. The Certified EIR concluded that the General Plan Update policies listed below would help address impacts to tribal cultural resources by requiring project-specific tribal consultation and the preparation of an assessment for the potential to encounter tribal cultural resources. Adherence to existing regulations and General Plan Update policies would ensure that the General Plan Update's impact with respect to tribal cultural resources would be less than significant.

**General Plan Update Policies that Address Tribal Cultural Resources**

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-6 Identify, protect, and preserve important archaeological, paleontological, tribal, and historic resources for their aesthetic, scientific, educational, and cultural values.

OSEC-G-8 Recognize the Tribal Nations who first lived in the Carson area and preserve their identity, culture, and artifacts. Consistent with state law, consult with local Tribal Nations and the Native American Heritage Commission to protect tribal cultural resources including sites, features, places, cultural landscapes, sacred places, or objects with cultural value to the tribes that is on or eligible for inclusion in the California Register of Historic Resources or a local historic register.

*Implementing Policies*

OSEC-P-9 For development and redevelopment proposals in archaeologically-or culturally-sensitive areas of Carson, require an assessment of the potential presence of archaeological and tribal cultural resources, including a site survey and a records search of the California Historical Resources Information System at the South Central

Coastal Information Center (SCCIC). As warranted by the results of the assessment, require additional studies to identify and address project-specific impacts on archaeological and tribal cultural resources.

OSEC-P-11 Proactively coordinate with the area's native tribes in the review and protection of any tribal cultural resources discovered at development sites.

**Mitigation Measures**

None required.

### 3.18.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, please, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is listed or eligible for listing in the California Register of Historical Resources, or in the local register of historical resources as defined in Public Resources Code Section 5020.1(k); or***

***(b) Would the Project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, please, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is a resource determined by the lead agency in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?***

As discussed in the response to Checklist Question 3.5.2(a), the Project Site is not listed or eligible for listing in the California Register of Historical Resources. The City does not have a local register of historical resources. To date, no significant tribal cultural resources have been identified on the Project Site.

A record search of the NAHC SLF for the Modified Project was conducted.[43] Results of the records search were negative. Although no known tribal cultural resources have been previously discovered on the Project Site, it is possible that tribal cultural resources could be discovered during ground disturbing activities. The Modified Project would continue to comply with **Mitigation Measure MM CUL-2** from the Certified EIR, which requires the preparation of an archaeological resource assessment. The City would incorporate the study recommendations as Modified Project conditions of approval to ensure that impacts on archaeological and/or tribal cultural resources are mitigated to the maximum extent possible. Additionally, the Modified Project would comply with the General Plan Update's Guiding and Implementing Policies as they relate to tribal cultural resources (listed above), which includes consulting with the local Tribal Nations and NAHC to protect tribal cultural resources, conducting an assessment of the potential presence of archaeological and tribal cultural resources, and proactively coordinating with the area's native tribes in the review and protection of any tribal cultural resources discovered at development sites. Thus, the Modified Project would not

[43]Native American Heritage Commission, Sacred Lands File record search result letter *Re: Tribal Consultation Under CEQA, Carson Civic Center Specific Plan Project, Los Angeles County*, September 8, 2025.

cause a substantial adverse change in the significance of a tribal cultural resource, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would occur on the same site and involve the same types of ground disturbing activities as the Modified Project. Although results of the NAHC SLF record search were negative, it is possible that tribal cultural resources could be discovered during ground disturbing activities. The Entertainment Retail Option would continue to comply with **Mitigation Measure MM CUL-2** from the Certified EIR. Additionally, the Entertainment Retail Option would comply with the General Plan Update's Guiding and Implementing Policies as they relate to tribal cultural resources (listed above). Therefore, the Entertainment Retail Option would not cause a substantial adverse change in the significance of a tribal cultural resource. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.18.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.18.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.18.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

The Modified Project and its Entertainment Retail Option would implement **Mitigation Measure MM CUL-2** from the Certified EIR.

### 3.18.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.19 UTILITIES AND SERVICE SYSTEMS

| Issues (and supporting Information Sources) | Impact Determination in the Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impact or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **UTILITIES AND SERVICE SYSTEMS**. Would the project: | | | | | |
| (a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | Less Than Significant | No | No | No | No |
| (b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | Less Than Significant | No | No | No | No |
| (c) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | Less Than Significant | No | No | No | No |
| (d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | Less Than Significant | No | No | No | No |
| (e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste? | Less Than Significant | No | No | No | No |

## 3.19.1 IMPACT DETERMINATION IN THE EIR

### *(a) Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction of which could cause significant environment effects?*

**Construction of Water Treatment Facilities.** As discussed in the Certified EIR, the Metropolitan Water District (MWD) treats the surface water provided to the West Basin Municipal Water District (WBMWD) and Central Basin Municipal Water District (CBMWD) at the F.E. Weymouth treatment plant located in La Verne. The facility has a capacity of 520 million gallons per day (mgd) and is currently treating an average of 224 mgd. Growth anticipated under the General Plan Update is expected to result in an increase of approximately 6.8 mgd of water over existing conditions. With an excess treatment capacity of 296 mgd, the F.E. Weymouth has sufficient remaining capacity to treat the full increase in water attributable to growth anticipated under the General Plan Update. Additionally, policies in the General Plan Update aim to conserve water through public education programs and the promotion of water conserving devices and practices in both new construction and major alterations, as well as additions to existing buildings. Such policies would help to reduce the demand on existing water treatment infrastructure and allow for meaningful consideration of

potential impacts of any future decisions regarding the provision of new infrastructure. The Certified EIR concluded that for these reasons, growth under the General Plan Update would not require or result in the relocation or construction of new or expanded water treatment facilities, and this impact would be less than significant.

**Construction of Wastewater Treatment Facilities.** As discussed in the Certified EIR, wastewater generated in the City is treated at the Joint Water Pollution Control Plant, which is located in Carson and operated by the LACSD. The facility has sufficient remaining capacity to treat the full increase in sewage attributable to growth anticipated under the General Plan Update. Additionally, policies in the General Plan Update aim to conserve water by curbing demand for domestic and commercial purposes and promoting water conservation strategies, thus reducing demand for water, and in turn, the generation of wastewater. Therefore, the Certified EIR concluded that growth under the General Plan Update would not require or result in the relocation or construction of new or expanded water treatment facilities, and this impact would be less than significant.

**Construction of Storm Drainage Facilities.** As discussed in the Certified EIR, the Los Angeles County Flood Control District (LACFCD) owns and maintains all major flood control channels. In addition, a majority of the storm drain system within the City was formally transferred through resolution to LACFCD, which maintains complete ownership and maintenance of the system. However, storm water quality is the responsibility of the City.

Storm water runoff may mobilize pollutants (e.g., trash, oil, etc.) and sediments, which contribute to pollution in rivers, lakes, and the ocean. Conversely, storm water runoff can be seen as a resource for recharging groundwater supplies. The state regulates storm water discharges through the NPDES program. The NPDES program was established to ensure storm water is used as a resource, while reducing any harmful pollutants to the greatest extent possible to maintain the beneficial uses of our rivers, lakes and ocean.

The RWQCBs have adopted NPDES permits to regulate storm water for municipalities. Under that permit is the Municipal Storm Water Program, which regulates storm water discharges from MS4s throughout California. An MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, human-made channels, or storm drains) owned or operated by a local agency. In this area, the Los Angeles RWQCB holds the NPDES permit and Los Angeles County holds the MS4 permit.

The City is a co-permittee under the County's MS4 permit. The County's MS4 permit was last amended in November 2016. The permit details discharge prohibitions (i.e., monitoring and reporting, watershed management programs, control measures, and total maximum daily loads). In addition, the City has joined the Dominguez Channel Watershed Management Group, which was developed to implement the NPDES requirements on a watershed scale.

A key provision of these regulations requires that the initial (or "first flush") storm water runoff is detained and treated on-site prior to entering the County's storm drain system. First flush is the initial surface runoff during a storm event that typically contain higher concentrations of pollutants compared to the remainder of the storm. Specifically, the County requires that projects mitigate the first three-quarter inch of rainfall for each storm event and be designed to minimize the introduction of pollutants from the site runoff into the storm water conveyance system. Any new development and/or significant redevelopment in the City would be subject to these requirements. From a storm drain infrastructure perspective, these regulations restrict increases in storm water runoff from any new development and/or significant redevelopment. Therefore, existing storm drain conveyance systems would likely not require upsizing, regardless of changes to land use types. Should new storm drain conveyance infrastructure be required, construction of those facilities could result in adverse environmental effects. As all new storm drain conveyance infrastructure could be provided

within and immediately surrounding the Planning Area, the potential impacts of these improvements are considered throughout the technical sections of the Certified EIR. In addition, future facilities would be required to comply with the City's requirements for construction projects, including but not limited to, grading permits and encroachment permits. Therefore, the Certified EIR concluded that storm water generated by development allowed under the General Plan Update would not result in additional impacts related to the provision of storm drain infrastructure, and this impact would be less than significant.

**Construction of Electrical Facilities.** As discussed in the Certified EIR, it is possible that development proposed under the General Plan Update could result in the provision of new electrical power facilities, including new or upgraded substations and/or transmission lines. However, all new development would be subject to the CALGreen code, which establishes mandatory energy efficiency measures for new residential and non-residential buildings. Compliance with current CALGreen requirements and General Plan Update policies that promote renewable energy generation and energy efficiency would ensure that new development associated with the implementation of the General Plan Update would be energy efficient, thus, reducing the need for new electrical power infrastructure. Should upgrades to new facilities be required, construction of those facilities could result in adverse environmental effects. As all new electrical power infrastructure could be provided within and immediately surrounding the Planning Area, the potential impacts of these improvements are considered throughout the technical sections of the Certified EIR. In addition, future facilities would be required to comply with the City's requirements for construction projects, including but not limited to, grading permits and encroachment permits. Therefore, the Certified EIR concluded that project-related electricity demand would not result in additional impacts related to the provision of electrical power infrastructure, and this impact would be less than significant.

**Construction of Natural Gas Facilities.** As discussed in the Certified EIR, it is possible that development proposed under the General Plan Update could result in the provision of new natural gas facilities, including new and/or upgraded pipelines. SoCalGas projects that total gas demand in its service area would decline at an annual rate of one percent from 2020–2035 due to modest economic growth and CPUC-mandated energy efficiency standards and projects. Additionally, all new development would be subject to energy efficiency standards contained in the CALGreen code, thus, reducing the need for new natural gas infrastructure. Should upgrades be required, construction of those facilities could result in adverse environmental effects. As all new natural gas infrastructure could be provided within and immediately surrounding the Planning Area, the potential impacts of these improvements are considered throughout the technical sections of the Certified EIR. In addition, future facilities would be required to comply with the City's requirements for construction projects, including but not limited to, grading permits and encroachment permits. Therefore, the Certified EIR concluded that project-related natural gas demand would not result in additional impacts related to the provision of natural gas infrastructure, and this impact would be less than significant.

**Construction of Telecommunications Facilities.** As discussed in the Certified EIR, it is possible that development proposed under the General Plan could result in the provision of new telecommunication facilities. Should upgrades to telecommunication infrastructure be required, construction of those facilities could result in adverse environmental effects. As all new telecommunication infrastructure could be provided within and immediately surrounding the Planning Area, the potential impacts of these improvements are considered throughout the technical sections of the Certified EIR. In addition, future facilities would be required to comply with the City's requirements for construction projects, including but not limited to, grading permits and encroachment permits. Therefore, project related demand for new telecommunications services would not result in additional impacts related to the provision of telecommunication infrastructure, and this impact would be less than significant.

***(b) Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?***

As discussed in the Certified EIR, the City is served by two water service providers, Cal Water and Golden State Water (GSW). Cal Water Dominguez District serves most of the City through a combination of local groundwater and surface water purchased from MWD. The anticipated water demand changes rely on per capita water consumption. As presented in Cal Water's 2020 Urban Water Management Plan, the Cal Water Dominguez District service area is currently using 157 gallons of water per capita per day (GPCD).

GSW serves the northwest corner of the City and also provides its customers with a combination of local groundwater and surface water purchased from the MWD. As presented in GSW's 2020 Urban Water Management Plan (UWMP), the service population was 278,787 in the year 2020. With a demand for potable and non-potable water in the year 2020 of 26,228 acre-feet (AF) per year, or 23,414,849 gallons per day (gpd), the GSW service area is currently using 84 gallons of water per GPCD.

Cal Water serves the majority of the City and has a higher per capita water use estimate than GSW. Therefore, based on estimated population increase of 43,600 residents due to implementation of the General Plan Update and a water use rate of 157 GPCD, water demand within the Planning Area would increase by approximately 6.8 mgd.

As stated in the 2020 UWMP for Cal Water, purchased water is 100 percent reliable and would make up the differences between demand and other projected supplies (groundwater and recycled water). As a result, Cal Water has adequate supplies to meet demand under normal, single dry year, and five consecutive dry year conditions through the year 2045, which is five years beyond the horizon year of the General Plan Update in 2040. In addition, as stated in the GSW 2020 UWMP, GSW also has reliable supplies to meet demand under normal, single dry year, and five consecutive dry year conditions through the year 2045. While it is expected that there will be sufficient water supplies available to serve the developments associated with the General Plan Update from existing entitlements and resources, growth under the update was not specifically accounted for in the UWMP for each local water provider. However, as UWMPs are based on adopted land use forecasts and plans, Cal Water and GSW would be required to account for this growth during the next UWMP update cycle in 2025, and thus, they would have sufficient time to account for future development in the City in their planning process prior to the General Plan Update's horizon year of 2040.

Individual development proposals that meet the definition of a project under CEQA would be required to address water supply as part of the CEQA process, and for qualifying projects, a water supply assessment (WSA) would be required pursuant to SB 610 for inclusion in the project's CEQA analysis. The WSA discerns whether the expected demand from the development being proposed has been accounted for in the forecasted demands in the most recent UWMP. A Written Verification of Supply per SB 221 is prepared as a condition of approval for a subdivision map of 500 units or more. Considered a fail-safe mechanism to provide sufficient evidence that adequate water supplies are available before construction begins, the Written Verification of Supply is also prepared/adopted by the water supplier and approved by the land use authority. Depending on the project, one or both of these analyses may be required.

The City is taking several steps to decrease its reliance on imported water and overall water demand. For example, the City partners with the WBMWD to encourage residents to conserve water through programs such as the Water for Tomorrow Program, which seeks to protect the district's existing water supply as well as diversify and augment its sources. The City also requires

projects to comply with CARSONSCAPE, the City's MWELO, which promotes the values and benefits of landscaping practices that integrate conservation and efficient use of water through planning, design, installation, maintenance, and management of water-efficient landscapes in new construction and rehabilitated projects.

Water providers in the City, such as Cal Water, promote water conservation through rebates, conservation kits (which include high-efficiency showerheads, hose nozzles, faucet aerators, and toilet leak tablets), the Smart Landscape Tune-Up Program, and the $H_2O$ Challenge educational program. Furthermore, all new developments would also be subject to water conservation standards contained in the CALGreen code. Compliance with current CALGreen requirements would ensure that new development associated with the implementation of the General Plan Update would establish water conservation features. Equally important, implementation of policies in the General Plan Update would reduce the overall existing and future water usage in the City by curbing demand for domestic and commercial purposes and promoting water conservation strategies. Policies also seek to ensure the long-term quality and maintenance of water supplies by requiring the City to work with Cal Water, GSW and MWD to ensure adequate availability of water to meet future needs. Finally, in the event of a water shortage, Cal Water and GSW would rely on their Water Shortage Contingency Plans (WSCP), which are to be engaged in the case of a water shortage event, such as a drought or supply interruption. The WSCPs for both Cal Water and GSW include six levels to address shortage conditions ranging from up to 10 percent to greater than 50 percent shortage, identifies a suite of demand mitigation measures to implement at each level, and identifies procedures to annually assess whether or not a water shortage is likely to occur in the coming year.

The Certified EIR concluded that for these reasons, sufficient water supply would be available to serve future development allowed under the General Plan Update during normal, dry, and multiple dry years. Therefore, the impact with respect to water supply would be less than significant.

***(c) Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

As discussed in the Certified EIR, growth anticipated under the General Plan Update would generate additional wastewater. It is estimated that about 90 percent of the per capita water consumption becomes wastewater flows. As a result, it is estimated that growth anticipated under the General Plan Update would result in an increase of approximately 6.1 mgd (i.e., expected water use times wastewater generation factor) of wastewater over existing conditions.

Wastewater generated in the City is treated at the Joint Water Pollution Control Plant, which is located in Carson and operated by the LACSD. The plant has a design capacity of 400 mgd and currently treats an average of 260 mgd. Based on current treatment levels at the Joint Water Pollution Control Plant and the design capacity, the facility has sufficient remaining capacity to treat the full increase in sewage attributable to growth anticipated under the General Plan.

Additionally, policies in the General Plan Update aim to conserve water by curbing demand for domestic and commercial purposes and promoting water conservation strategies, thus reducing demand for water, and in turn, the generation of wastewater. Furthermore, current regulations would not allow development without adequate utility capacity, including wastewater treatment capacity. Potential future development projects would be reviewed by the City and LACSD to determine that sufficient capacity exists to serve the development.

The Certified EIR concluded that for the reasons stated above, adequate wastewater treatment capacity would exist to treat growth anticipated under the General Plan Update in addition to

LACSD's existing commitments. Therefore, the impact with respect to wastewater treatment capacity would be less than significant.

***(d) Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

As discussed in the Certified EIR, the City receives refuse pickup and disposal service from Waste Resources and EDCO Disposal and Waste Management Services. Once collected from areas within the City, the majority of refuse (88 percent) is delivered to H.M Holloway Inc., El Sobrante, and Chiquita Canyon landfills. According to CalRecycle, the H.M. Holloway Inc. Landfill has a remaining capacity of approximately seven million tons, and is expected to remain in operation until 2030, the El Sobrante Landfill has a remaining capacity of about 144 million tons, and it is expected to remain in operation until 2051, and the Chiquita Canyon Sanitary landfill has a remaining capacity of 60 million tons and is expected to remain in operation until 2047.

In 2019, the most recent year data was available, Carson disposed of about 14.1 pounds per resident per day (PPD) of waste to landfills. Although the annual per capital disposal rate has been increasing since 2014, both the per resident and per employee disposal rates are less than their respective targets calculated by CalRecycle (19.3 and 37.3, respectively, as of June 2021). Using a PPD disposal rate of 14.1 and a projected increase in population of 43,600, it is estimated that a total increase of 614,760 PPD or 112,194 tons per year would be disposed of at buildout of the General Plan Update. Therefore, although the H.M. Holloway Inc. Landfill is expected to remain open until 2030 and would close prior to the anticipated buildout of the General Plan Update, solid waste generated under the update would reasonably be within the capacity of other facilities serving the City. For example, the 112,194 tons per day generated by the increase in population under the General Plan Update represents 0.1 and 0.2 percent of remaining capacity of the El Sobrante and Chiquita Canyon landfills, respectively.

As indicated above, the LACPWD prepares and administers the Countywide Integrated Waste Management Plan (IWMP). For the current planning period from 2017 to 2032, the IWMP Annual Report estimates that a shortfall in permitted solid waste disposal capacity is not anticipated for the County. The IWMP also states that the cumulative need at the County level for Class III landfill disposal capacity, approximately 126.4 million tons in 2032, will not exceed the 2017 remaining permitted Class III landfill capacity of 167.6 million tons.

Given the remaining capacity at currently landfills serving the City and the County's ability to meet its disposal targets, meeting the collection, transfer, recycling, and disposal needs of the General Plan Update would not result in adverse impacts on landfill facilities. It is also likely that changes in regulations will occur that will decrease the need for landfill capacity through new recycling measures (e.g., conversion technology facilities, material recovery facilities, waste resource projects). Compliance with solid waste regulations and General Plan Update policies that promote recycling would further address potential impacts.

The Certified EIR concluded that for the reasons stated above, growth anticipated under the General Plan Update would not generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals. Therefore, the impact with respect to solid waste disposal capacity would be less than significant.

***(e) Would the Project comply with federal, state and local management and reduction statutes and regulations related to solid waste?***

As discussed in the Certified EIR, AB 939 mandated that California generates a 25 percent diversion rate by 1995 and a 50 percent diversion rate by 2000. AB 341, adopted in 2012, requires that commercial enterprises that generate four cubic yards or more of solid waste and multi-family housing complexes of five units or more weekly participate in recycling programs in order to meet California's goal to recycle 75 percent of its solid waste by 2020. SB 1383, adopted in 2016, establishes goals of 50 percent organics waste reduction by 2020 and 75 percent reduction by 2025.

Development under the General Plan Update would be required to comply with federal, state, and local statutes and regulations related to solid waste. Furthermore, the policies provided in the General Plan Update require the City to expand educational outreach about solid waste reduction and recycling programs and to divert 75 percent (or more) of waste from landfills by 2022 and maintain a diversion rate of 75 percent or greater through 2040. For these reasons, growth anticipated under the General Plan Update would comply with federal, state, and local management and reduction statutes and regulations related to solid waste. Therefore, the Certified EIR concluded that the impact with respect to solid waste regulations would be less than significant.

**General Plan Update Policies that Address Utilities and Service Systems**

***Open Space and Environmental Conservation***

*Guiding Policies*

OSEC-G-10 Provide for utilities and infrastructure to deliver safe, reliable services for current and future residents and businesses.

OSEC-G-12 Promote water conservation strategies in the community by increasing awareness and expanding access to programs.

OSEC-G-13 Encourage integration of water conservation measures for both existing and new development and promote utilization of recycled water for appropriate uses.

OSEC-G-14 Promote sustainable energy generation practices to support energy security that is resilient to blackouts and other climate or anthropogenic disasters.

OSEC-G-15 Implement programs and work with jurisdictional partners to increase sustainable energy production and energy security.

OSEC-G-16 Reduce the generation of solid waste, including hazardous waste, and promote recycling of materials to reduce waste accumulation slow in local and regional landfills.

OSEC-G-25 Demonstrate leadership by reducing the use of energy and fossil fuel consumption in municipal operations, including transportation, waste and water reduction, recycling, and by promoting efficient building design and use.

*Implementing Policies*

OSEC-P-23 Safely manage the water supply and services, wastewater, sewer, recycled water, and storm drain infrastructure in a manner that provides for future growth of the City.

OSEC-P-24 Prepare an updated Sewer System Management Plan that meets Statewide General Waste Discharge Requirements and qualifies as a Monitoring and Reporting Program

for sanitary sewer systems. Conduct audits every three years and update the plan every five years or as necessary.

OSEC-P-25 Through partnership with the Los Angeles County Sanitation Districts, promote utilization of recycled water created under the RRWP for non-potable water needs.

OSEC-P-26 Work with California Water Service Company, Golden State Water Company, and Metropolitan Water District to ensure adequate availability of water to meet future needs.

OSEC-P-27 Promote education for residents and businesses on the benefits of conserving water and explore incentives for lowering water usage.

OSEC-P-28 Establish guidelines and standards for water conservation and actively promote the use of water-conserving devices and practices in both new construction and major alterations as well as additions to existing buildings. Strategies include:

- Requiring water-conserving design and equipment in new construction
- Encouraging retrofitting with water-conserving devices
- Requiring Low Impact Development principles and guidelines during site design
- Promoting the use of greywater in large developments for non-potable water uses

OSEC-P-29 Promote renewable energy generation and storage to decrease reliance on outside sources and minimize impacts from blackouts.

OSEC-P-30 Continue to work toward reducing solid waste, increasing recycling, and complying with the Los Angeles County Integrated Waste Management Plan.

OSEC-P-31 Expand educational outreach about solid waste reduction and recycling programs and work to provide programs and informational materials in multiple languages.

OSEC-P-32 Further the City's goals to promote recycling, composting, and source reduction services for residential and commercial uses to divert 75% (or more) of waste from landfills by 2022 and maintain diversion at 75% or greater through 2040. See Assembly Bill No. 341 for additional information regarding waste diversion.

OSEC-P-41 Encourage efficient, clean energy and fuel use through collaborative programs, award programs, and incentives, while also removing barriers to the expansion of alternative fuel facilities and infrastructure.

OSEC-P-51 Use the CAP as the City's primary strategy to reduce GHG emissions, including strategies related to land use and transportation, energy efficiency, solid waste, urban greening, and energy generation and storage.

OSEC-P-57 Facilitate energy efficiency in building regulations, providing flexibility to achieve specified energy performance levels and requiring energy efficiency measures as appropriate.

OSEC-P-58 Support sustainability measures to reduce and conserve municipal and private energy uses, especially from commercial and industrial uses which consume 78 percent of the City's total electric usage.

OSEC-P-59 Coordinate with the business and industrial community to encourage energy efficiency in the City's largest energy users while supporting economic growth objectives.

### *Open Space and Environmental Conservation*

*Guiding Policies*

OSEC-G-16 Reduce the generation of solid waste, including hazardous waste, and promote recycling of materials to reduce waste accumulation in local and regional landfills.

**Mitigation Measures**

None required.

## 3.19.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) Would the Project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities or expansion of existing facilities, the construction of which could cause significant environment effects?***

**Construction of Local Water Distribution Infrastructure – Domestic Water.** The Project Site is served by a variety of water lines ranging from 6 to 10 inches in diameter. The size of the nearest domestic water main to the proposed land uses associated with the Modified Project are shown in **Table 3-36**, along with the water main sizing criteria for domestic water flow (i.e., the maximum amount of domestic water flow that a water main can accommodate based on the size of the water main). The sizing criteria was obtained from the Los Angeles Department of Water and Power. **Table 3-36** also presents the estimated increase in water demand for the proposed land uses associated with the Modified Project. Water demand for the existing City Hall and Community/Event Center are not expected to change and, thus, are not presented in the table below. As shown in **Table 3-36**, the water distribution mains surrounding the Project Site are anticipated to have the capacity to accommodate the increased domestic water demand associated with the Modified Project and, thus, the construction of upgraded domestic water distribution main would not be necessary. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-36: ESTIMATED WATER DEMAND FOR WATER DISTRUBTION MAINS – MODIFIED PROJECT**

| Proposed Land Use | Modified Project Water Demand (gpd) | Modified Project Water Demand (gpm) | Size of Nearest Existing Water Distribution Main | Domestic Water Sizing Criteria for Water Main (gpm) /a/ | Water Demand Exceed Sizing Criteria? |
|---|---|---|---|---|---|
| New City Hall (including retail and restaurants) | 40,900 | 28.4 | 8 inches | 1,500 | No |
| Performing Arts Center | 15,500 | 10.8 | 8 inches | 1,500 | No |
| Hotel (including retail and restaurants) | 57,000 | 39.6 | 10 inches | 2,500 | No |
| Hotel Amenity Deck | 42,000 | 29.2 | 10 inches | 2,500 | No |
| Interactive Museum | 8,750 | 6.1 | 6 inches | 700 | No |
| Mixed-Use Housing | 25,340 | 17.6 | 6 inches | 700 | No |

gpd = gallons per day; gpm = gallons per minute
**Note:** Future water demand was estimated using the projected sewer generation factor with a one to one conversion factor.
/a/ Sizing criteria is the maximum amount of domestic water flow that the water main can accommodate based on the size of the water main.
**SOURCE:** California Water Service, *2020 Urban Water Management Plan: Dominguez District*, June 2021; Los Angeles Department of Water and Power, *Application for Water Pressure – Flow Report*, July 2023; KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

**Construction of Local Water Distribution Infrastructure – Fire Water.** The fire flow requirements associated with the proposed land uses associated with the Modified Project are presented in **Table 3-37** along with the water main sizing criteria for fire flow (i.e., the maximum amount of fire water flow that a water main can accommodate based on the size of the water main). The sizing criteria was obtained from the Los Angeles Department of Water and Power. Minimum fire flow requirements are based on California Fire Code Appendix B, Section B105. To provide a conservative analysis, the structures associated with the Modified Project are assumed to be of type IIIA construction. Existing buildings that are proposed to remain were assumed to have appropriate fire water protection and were excluded from this analysis. As presented in the table, the 6-inch water distribution main closes to the proposed mixed-use housing development may require to be upsized to at least 8 inches to support the increased fire flow requirement generated by the proposed mixed-use housing development. Fire flow requirements may be reduced if the actual construction type is classified as type IA or IB. The adequacy of the water distribution main to support adequate fire water flow would be verified during the design process of the proposed developments. Upsizing the water distribution main is not expected to cause significant environmental effects since this utility upgrade would be part of the construction activities associated with the Modified Project, which has been considered throughout this addendum. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-37: ESTIMATED FIRE FLOW REQUIREMENTS FOR WATER DISTRIBUTION MAINS – MODIFIED PROJECT**

| Proposed Land Use | Minimum Fire Flow Required by Land Use (gpm) | Size of Nearest Existing Water Distribution Main | Fire Flow Sizing Criteria for Water Main (gpm) /a/ | Fire Flow Requirement Exceed Sizing Criteria? |
|---|---|---|---|---|
| New City Hall (including retail and restaurants) | 1,500 | 8 inches | 2,500 | No |
| Performing Arts Center | 1,250 | 8 inches | 2,500 | No |
| Hotel (including retail and restaurants) /a/ | 1,500 | 10 inches | 5,000 | No |
| Hotel Amenity Deck | 1,250 | 10 inches | 5,000 | No |
| Interactive Museum | 1,000 | 6 inches | 1,400 | No |
| Mixed-Use Housing /b/ | 1,500 | 6 inches | 1,400 | Yes |
| Subterranean Parking | 1,500 | 12 inches | >5,000 | No |

gpm = gallons per minute
**Note:** Construction type IIIA was assumed to provide a conservative analysis.
/a/ Sizing criteria is the maximum amount of domestic water flow that the water main can accommodate based on the size of the water main.
/b/ Type R occupancy.
**SOURCE:** California Water Service, *2020 Urban Water Management Plan: Dominguez District*, June 2021; Los Angeles Department of Water and Power, *Application for Water Pressure – Flow Report*, July 2023; KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

**Construction of Water Treatment Facilities.** As discussed in the Certified EIR, the F.E. Weymouth treatment facility has a capacity of 520 mgd and is currently treating an average of 224 mgd of water, which leaves an available capacity of 296 mgd. The Modified Project would increase water demand by approximately 189,490 gpd. The F.E. Weymouth water treatment facility would have sufficient available remaining capacity to treat the water associated with the Modified Project in addition to existing commitments. Additionally, the Modified Project would be required to implement the General Plan Update policies that aim to conserve water through public education programs and the promotion of water conserving devices and practices in new construction. Such policies would help to reduce the demand on existing water treatment infrastructure and allow for meaningful consideration of potential impacts of any future decisions regarding the provision of new infrastructure. Thus, the Modified Project would not require or result in the relocation or construction of new or expanded water treatment facilities, the construction of which could cause significant environment effects. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Local Sewer Infrastructure.** The ownership of the sewer infrastructure in the City is split between the Los Angeles County Sanitation Districts (LACSD), who maintains the trunk lines, and the Los Angeles County Department of Public Works (LADPW) Consolidated Sewer Maintenance District, who owns the rest of the public mains.

The Project Site is adjacent to three sewer pipes:

- SS1: A 15-inch LACSD vitrified clay pipe (VCP) trunk line along Avalon Boulevard flowing north and turning west on East 213rd Street.
- SS2: A 12-inch LACSD VCP trunk line flowing west along Carson Street and typing into SS1 at the Avalon Boulevard/Carson Street intersection.
- SS3: An 8-inch LADPW VCP main running along Desford Street to the north, flowing west towards Avalon Boulevard, where it joins into SS1.

SS2 and SS3 are tributaries to SS1. Thus, any new development tying into SS2 and SS3 would also affect SS1.

LACSD provides flow monitoring data for SS1 and SS2. LACSD load factors were used to estimate existing sewage flow in SS3 since flow monitoring data for SS3 could not be obtained from LADPW. **Table 3-38** presents the existing capacities for the sewer pipes serving the Project Site. Per the Los Angeles County Land Development Division Sewer Capacity Memo, pipes smaller than 15 inches in diameter are considered to be at maximum capacity when the pipes are 50 percent full. Since the pipe diameter for SS2 is 12 inches in diameter and is 57.1 percent full, this sewer pipe at full capacity under existing conditions.

**TABLE 3-38: EXISTING SEWER PIPE CAPACITIES**

| Pipe ID | Pipe Diameter (inches) | Slope (percentage) | Maximum Capacity (cubic feet per second) | Last Measured/Estimated Flow (cubic feet per second) /a/ | Percent Full |
|---|---|---|---|---|---|
| SS1 | 15 | 0.10 | 2.2 | 0.92 | 47.0 |
| SS2 | 12 | 0.10 | 1.1 | 0.70 | 57.1 |
| SS3 | 8 | 0.32 | 0.34 | 0.15 | 31.9 |

/a/ Maximum capacity and existing flow data for SS1 and SS2 were lasted recorded on September 14, 2015. SS3 flow were estimated using LACSD load factors.
**SOURCE:** KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

Using the LACSD sewer loading factors, sewer generation by the proposed land uses associated with the Modified Project was estimated. **Table 3-39** presents the estimated sewer generation associated with the proposed land uses for the Modified Project and the sewer main that the proposed land uses would connect to with implementation of the Modified Project. Sewer generation for the existing City Hall and Community/Event Center is not expected to change and, thus, are not presented in the table. The Modified Project is estimated to generate approximately 189,490 gpd of wastewater.

**TABLE 3-39: ESTIMATED SEWER GENERATION – MODIFIED PROJECT**

| Proposed Land Use | LACSD Land Use Type | LACSD Sewer Loading Factor | Proposed Land Use Size | Modified Project Sewer Generation (gpd) | Nearest Sewer Main |
|---|---|---|---|---|---|
| New City Hall including retail and restaurants) | Office Building<br>Shopping Center | 200 gpd/1,000 sf<br>350 gpd/1,000 sf | 187,000 sf<br>10,000 sf | 37,400<br>3,500 | SS2 |
| Performing Arts Center | Indoor Theater | 125 gpd/1,000 sf | 124,000 sf | 15,500 | SS1 |
| Hotel (including retail and restaurants) | Hotel<br>Shopping Center | 125 gpd/room<br>350 gpd/1,000 sf | 400 rooms<br>20,000 sf | 50,000<br>7,000 | SS2 |
| Hotel Amenity Deck | Shopping Center | 350 gpd/1,000 sf | 120,000 sf | 42,000 | SS2 |
| Interactive Museum | Shopping Center | 350 gpd/1,000 sf | 25,000 sf | 8,750 | SS2 |
| Mixed-Use Housing | Residential – 5+ Units<br>Shopping Center | 156 gpd/unit<br>350 gpd/1,000 sf | 140 du<br>10,000 sf | 3,500<br>21,840 | SS3 |

**Notes:** gpd = gallons per day; sf = square feet; du = dwelling units
/a/ Square footage for the new City Hall, performing arts center, and mixed-use housing under the Entertainment Retail Option would be the same as the Modified Project.
**SOURCE:** KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

Based on the estimated sewer generation associated with the proposed land uses for the Modified Project as presented in **Table 3-40**, above, the estimated increase in sewer flow in the surrounding sewer mains were calculated. The total proposed flow in the sewer mains was calculated by adding the estimated flow increase associated with the Modified Project to the existing sewer flows. As shown in **Table 3-40**, SS1 and SS3 are estimated to have sufficient capacity to support the Modified Project. SS2 is at full capacity under existing conditions and, thus, improvements to this sewer main would be required to support the Modified Project, as well as to accommodate growth in the City. Improvements to SS2 are not expected to cause significant environmental effect since this utility upgrade would be part of the construction activities associated with the Modified Project, which has been considered throughout this addendum. Additionally, development associated with the Modified Project would be required to obtain a will-serve letter from LACSD and LADPW during plan check to ensure that the sewer mains serving the Project Site would adequately serve the proposed uses associated with the Modified Project. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-40: ESTIMATED INCREASED SEWER FLOW IN SURROUNDING SEWER MAINS – MODIFIED PROJECT**

| Pipe ID | Modified Project Increased Flow (cubic feet per second) | Total Existing plus Modified Project Flow (cubic feet per second) | Percentage Full |
|---|---|---|---|
| SS1 | 0.29 | 1.21 | 55.4 |
| SS2 | 0.23 | 0.93 | 69.2 |
| SS3 | 0.04 | 0.19 | 36.1 |

**SOURCE:** KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

**Construction of Wastewater Treatment Facilities.** Wastewater generated from the Project Site would be collected by sewer pipelines that are maintained by the City's Public Works Department. Wastewater collected by the sanitary sewer pipes adjacent to the Project Site is conveyed to the LACSD A.K. Warren Water Resource Facility (Warren Facility, formerly known as the Joint Water Pollution Control Plant).[44] The Warren Facility treats approximately 260 mgd of wastewater and has a total permitted capacity of 400 mgd of wastewater, which leaves an available capacity of 140 mgd.[45]

Based on the LACSD sewer loading factors as presented in **Table 3-39**, above, the Modified Project is estimated to generate approximately 189,490 gpd of wastewater, which is less-than-one percent of the available capacity at the Warren Facility.[46] The Warren Facility would have adequate remaining available capacity to serve the Modified Project in addition to existing commitments. The Modified Project would not cause the Warren Facility to exceed wastewater treatment requirements of the LARWQCB. Thus, new or expanded wastewater treatment facilities would not be required, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

[44]Los Angeles County Sanitation Districts, *Facilities: 1 A.K. Warren Water Resource Facility*, https://www.app.lacsd.org/facilities/?tab=2&number=1, accessed March 2025.

[45]Los Angeles County Sanitation Districts, *Wastewater Treatment Process at the Warren Facility*, https://www.lacsd.org/services/wastewater-sewage/facilities/ak-warren-water-resource-facility/wastewater-treatment-process, accessed March 2025.

[46]Assumes a generation rate of 340 gallons per day for each multi-family residential unit and 300 gallons per day per 1,000 square feet for professional buildings. Los Angeles County Sanitation Districts, *Table 1, Loadings for Each Class of Land Use*, https://www.lacsd.org/home/showpublisheddocument/3644/637644575489800000, accessed July 2022.

**Construction of Stormwater Drainage Facilities.** Existing stormwater runoff from the Project Site is collected by existing catch basins along Civic Center Drive, Civic Plaza Drive, Carson Street, Avalon Boulevard, and Desford Street. The catch basins along these streets connect to two drainage facilities that are both owned and maintained by LACFCD. The two drainage facilities that serve the Project Site are as follows:

- BI 0540 – U2 Line – South Torrance: Located along Carson Street adjacent to the Project Site, this drainage facility is a large rectangular reinforced concrete box culvert with interior dimensions of 8 feet 10 inches wide by 10 feet 5 inches tall. It is a major regional storm drain to the Dominguez Channel. It has a slope of 0.10 percent and conveys an estimated full-flow capacity of approximately 594.5 cubic feet per second. This culvert plays a critical role in reducing flood risk, particularly during large storm events.

- 213rd Street Drain: This drainage facility is located along Avalon Boulevard and 213th Street. Along Avalon Boulevard, this drainage facility extends from just north of the existing City Hall to 213th Street. On 213th Street, this storm drain is situated between Avalon Boulevard and the Dominguez Channel. This drainage facility is comprised of a 24-inch diameter reinforced concrete pipe and serves localized drainage needs. It has a slope of 0.11 percent and can convey an estimated maximum of 7.50 cubic feet per second under full-flow conditions.

These facilities represent components of the local and regional stormwater conveyance infrastructure, serving to collect and transport stormwater runoff generated within the Dominguez Channel Watershed in which the project is located. The Modified Project would decrease the amount of impervious surfaces on the Project Site compared to existing conditions, which would reduce the amount of runoff leaving the Project Site.

Development associated with the Modified Project would be required to comply with the latest requirements of the NPDES permit program, LARWQB, and applicable pollution control and stormwater drainage measures, including the City's Storm Water Management and Discharge Control Ordinance (CMC Chapter 8), which includes LID requirements (CMC Section 5809(a)) to reduce runoff. The proposed Specific Plan identifies LIDs that could be incorporated into future development on the Project Site to control stormwater at the source and allow it to slowly infiltrate and filter through plants and soils. These low impact sustainable stormwater designs include the installation of swales, infiltration trenches, rain gardens, permeable paving, runnels, and flow-through planters. Curb extensions could also be installed to slow stormwater flows and filter and infiltrate stormwater before it reaches the storm drain network. The curb extensions could also take on the characteristics of bioretention areas, swales, or planters. Implementation of LID features identified in the proposed Specific Plan and compliance with regulatory requirements would ensure that development on the Project Site would not substantially increase compared to existing conditions.

As the Modified Project would decrease the amount of impervious surfaces on the Project Site, would comply with applicable requirements that would reduce stormwater runoff, and would implement LID features, the Modified Project would not cause an increase in the peak flow rates or volumes that would exceed the drainage capacity of existing stormwater drainage facilities. New or expanded stormwater drainage facilities beyond those that would be installed by the Modified Project would not be required, and the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Electric Power and Natural Gas Facilities.** Operation of the Modified Project would require electricity and natural gas consumption for interior and exterior building lighting, HVAC, electronic equipment, machinery, refrigeration, appliances, security systems, and more. The Modified Project would be served by SCE for electricity and SoCalGas for natural gas. The Project

Site is in a developed, urbanized area that is served by existing electrical power and natural gas services. The Modified Project would be subject to the Cal Green Code, which establishes mandatory energy efficiency measures for new residential and non-residential buildings and would reduce the need for new electricity and natural gas infrastructure. Compliance with current Cal Green Code requirements that promote renewable energy generation and energy efficiency would ensure that the Modified Project would be energy efficient, thus, reducing the need for new electrical power and natural gas infrastructure. No substantial electrical or natural gas infrastructure is present on or adjacent to the Project Site that would need to be relocated to accommodate the Modified Project. Any necessary upgrades to the existing electrical and natural gas infrastructure to serve the Modified Project could be provided within and immediately surrounding the Project Site. The potential for impacts of these improvements has been considered throughout this addendum. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Telecommunications Facilities.** Telecommunication services include phone, television, and internet providers. The Project Site is in a developed, urbanized area that is served by existing telecommunications services. The Modified Project would potentially require additions of new on-site telecommunications infrastructure to serve the proposed new developments and potential upgrades and/or relocation of existing telecommunications infrastructure. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the existing system. Thus, the Modified Project would not require or result in the relocation or construction of new or expanded telecommunications facilities, the construction of which could cause significant environment effects. Any work that may affect services to the existing telecommunications lines would be coordinated with service providers and is not expected to cause significant environmental effects. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

**Construction of Local Water Distribution Infrastructure – Domestic Water.** The Entertainment Retail Option would be served by the same water mains as the Modified Project. **Table 3-41** presents the estimated increase in water demand for the proposed land uses associated with the Entertainment Retail Option. As with the Modified Project, the renovation of the existing City Hall and Community/Event Center is not expected to cause a change in water demand and, thus, are not presented in the table below. As presented in **Table 3-41**, all surrounding water distribution mains are anticipated to have the capacity to accommodate the increased domestic water demand associated with the Entertainment Retail Option. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-41: ESTIMATED WATER DEMAND FOR WATER DISTRUBTION MAINS – ENTERTAINMENT RETAIL OPTION**

| Proposed Land Use | Modified Project Water Demand (gpd) | Entertainment Retail Option Water Demand (gpm) | Size of Nearest Existing Water Distribution Main | Domestic Water Sizing Criteria for Water Main (gpm) /a/ | Water Demand Exceed Sizing Criteria? |
|---|---|---|---|---|---|
| New City Hall (including retail and restaurants) | 40,900 | 28.4 | 8 inches | 1,500 | No |
| Performing Arts Center | 15,500 | 10.8 | 8 inches | 1,500 | No |
| Entertainment Retail Center | 125,500 | 87.2 | 10 inches | 2,500 | No |
| Interactive Museum | 10,500 | 7.3 | 6 inches | 700 | No |
| Mixed-Use Housing | 25,340 | 17.6 | 6 inches | 700 | No |

**Note:** gpd = gallons per day; gpm = gallons per minute
Future water demand was estimated using the projected sewer generation factor with a one to one conversion factor.
**SOURCE:** California Water Service, *2020 Urban Water Management Plan: Dominguez District*, June 2021; Los Angeles Department of Water and Power, *Application for Water Pressure – Flow Report*, July 2023; KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

**Construction of Local Water Distribution Infrastructure – Fire Water.** The fire flow requirements associated with the land uses proposed for the Entertainment Retail Option are presented in **Table 3-42**. To provide a conservative analysis, the structures associated with the Entertainment Retail Option are assumed to be of type IIIA construction. Existing buildings that are proposed to remain were assumed to have appropriate fire water protection and were excluded from this analysis. As presented in the table, the 6-inch water distribution main closes to the proposed mixed-use housing development may require to be upsized to at least 8 inches to support the increased fire flow requirement generated by the proposed mixed-use housing development. However, upsizing the water distribution main is not expected to cause significant environmental effects since this utility upgrade would be part of the construction activities associated with the Entertainment Retail Option, which has been considered throughout this addendum. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**TABLE 3-42: ESTIMATED FIRE FLOW REQUIREMENTS FOR WATER DISTRIBUTION MAINS – ENTERTAINMENT RETAIL OPTION**

| Proposed Land Use | Minimum Fire Flow Required by Land Use (gpm) | Size of Nearest Existing Water Distribution Main | Fire Flow Sizing Criteria for Water Main (gpm) /a/ | Fire Flow Requirement Exceed Sizing Criteria? |
|---|---|---|---|---|
| New City Hall (including retail and restaurants) | 1,500 | 8 inches | 2,500 | No |
| Performing Arts Center | 1,250 | 8 inches | 2,500 | No |
| Entertainment Retail Center | 1,500 | 10 inches | 5,000 | No |
| Interactive Museum | 1,000 | 6 inches | 1,400 | No |
| Mixed-Use Housing /a/ | 1,500 | 6 inches | 1,400 | Yes |
| Subterranean Parking | 1,500 | 12 inches | >5,000 | No |

**Note:** Construction type IIIA was assumed to provide a conservative analysis.
/a/ Sizing criteria is the maximum amount of domestic water flow that the water main can accommodate based on the size of the water main.
/b/ Type R occupancy.
**SOURCE:** California Water Service, *2020 Urban Water Management Plan: Dominguez District*, June 2021; Los Angeles Department of Water and Power, *Application for Water Pressure – Flow Report*, July 2023; KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

**Construction of Water Treatment Facilities.** The Entertainment Retail Option would be served by the same water treatment facility as the Modified Project. The Entertainment Retail Option would increase water demand by approximately 217,740 gpd. The F.E. Weymouth treatment facility has an available capacity of 296 mgd and, thus, this treatment facility would have sufficient available remaining capacity to treat the water associated with the Entertainment Retail Option in addition to existing commitments. The Entertainment Retail Option would also be required to implement the policies in the General Plan Update that aim to conserve water through public education programs and the promotion of water conserving devices and practices in new construction. These policies would help to reduce the demand on existing water treatment infrastructure and allow for meaningful consideration of potential impacts of any future decisions regarding the provision of new infrastructure. Thus, the Entertainment Retail Option would not require or result in the relocation or construction of new or expanded water treatment facilities, the construction of which could cause significant environment effects. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Local Sewer Infrastructure.** The Entertainment Retail Option would be served by the same sewer infrastructure as the Modified Project. Sewer generation by the proposed land uses associated with the Entertainment Retail Option was estimated using LACSD sewer loading factors. **Table 3-43** presents the estimated sewer generation associated with the proposed land uses for the Entertainment Retail Option and the sewer main that the proposed land uses would connect to with implementation of the Entertainment Retail Option. Sewer generation for the existing City Hall and Community/Event Center is not expected to change and, thus, are not presented in the table. The Entertainment Retail Option is estimated to generate approximately 217,740 gpd of wastewater.

**TABLE 3-43: ESTIMATED SEWER GENERATION – ENTERTAINMENT RETAIL OPTION**

| Proposed Land Use | LACSD Land Use Type | LACSD Sewer Loading Factor | Proposed Land Use Size | Entertainment Retail Option Sewer Generation (gpd) | Nearest Sewer Main |
|---|---|---|---|---|---|
| New City Hall including retail and restaurants) | Office Building<br>Shopping Center | 200 gpd/1,000 sf<br>350 gpd/1,000 sf | 187,000 sf<br>10,000 sf | 37,400<br>3,500 | SS2 |
| Performing Arts Center | Indoor Theater | 125 gpd/1,000 sf | 124,000 sf | 15,500 | SS1 |
| Entertainment Retail Center | Shopping Center<br>Restaurant | 350 gpd/1,000 sf<br>1 gpd/sf | 130,000 sf<br>80,000 sf | 45,500<br>80,000 | SS2 |
| Interactive Museum | Shopping Center | 350 gpd/1,000 sf | 30,000 sf | 10,500 | SS2 |
| Mixed-Use Housing | Residential – 5+ Units<br>Shopping Center | 156 gpd/unit<br>350 gpd/1,000 sf | 140 du<br>10,000 sf | 3,500<br>21,840 | SS3 |

**Notes:** gpd = gallons per day; sf = square feet; du = dwelling units
**SOURCE:** KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

Based on the estimated sewer generation associated with the proposed land uses for the Entertainment Retail Option as presented in **Table 3-43**, above, the estimated increase in sewer flow in the surrounding sewer mains were calculated. As shown in **Table 3-44**, SS1 and SS3 are estimated to have sufficient capacity to support the Entertainment Retail Option. As with the Modified Project, SS2 is at full capacity under existing conditions and, thus, improvements to this sewer main would be required to support the Entertainment Retail Option, as well as to accommodate growth in the City.

**TABLE 3-44: ESTIMATED INCREASED SEWER FLOW IN SURROUNDING SEWER MAINS – ENTERTAINMENT RETAIL OPTION**

| Pipe ID | Entertainment Retail Option Increased Flow (cubic feet per second) | Total Existing plus Entertainment Retail Option Flow (cubic feet per second) | Percentage Full |
|---|---|---|---|
| SS1 | 0.34 | 1.26 | 56.8 |
| SS2 | 0.27 | 0.97 | 71.5 |
| SS3 | 0.04 | 0.19 | 36.1 |

**SOURCE:** KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

Improvements to the sewer pipe are not expected to cause significant environmental effect since this utility upgrade would be part of the construction activities associated with the Entertainment Retail Option, which has been considered throughout this addendum. Additionally, development associated with the Entertainment Retail Option would be required to obtain a will-serve letter from LACSD and LADPW during plan check to ensure that the sewer mains serving the Project Site would adequately serve the proposed uses associated with the Entertainment Retail Option. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Wastewater Treatment Facilities.** The Entertainment Retail Option would be served by the same wastewater treatment facility as the Modified Project. Based on the LACSD sewer loading factors presented in **Table 3-43**, above, the Entertainment Retail Option is estimated to generate approximately 217,740 gpd of wastewater, which is less-than-one percent of the available capacity at the Warren Facility.[47] The Warren Facility would have adequate available capacity to serve the Entertainment Retail Option in addition to existing commitments. The Entertainment Retail Option would not cause the Warren Facility to exceed wastewater treatment requirements of the LARWQCB. Thus, new or expanded wastewater treatment facilities would not be required, and the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Stormwater Drainage Facilities.** The Entertainment Retail Option would be served by the same stormwater drainage facilities as the Modified Project. The Entertainment Retail Option would have a similar layout as the Modified Project and would decrease the amount of impervious surfaces on the Project Site compared to existing conditions, which would reduce the amount of runoff leaving the Project Site compared to existing conditions. Development associated with the Entertainment Retail Option would be required to comply with the latest requirements of the NPDES permit program, LARWQB, and applicable pollution control and stormwater drainage measures, including the City's Storm Water Management and Discharge Control Ordinance (CMC Chapter 8), which includes LID requirements (CMC Section 5809(a)) to reduce runoff. The proposed Specific Plan identifies LIDs that could be incorporated into future development on the Project Site to control stormwater at the source and allow it to slowly infiltrate and filter through plants and soils.

As the Entertainment Retail Option would decrease the amount of impervious surfaces on the Project Site, would comply with applicable requirements that would reduce stormwater runoff, and would implement LID features, the Entertainment Retail Option would not cause an increase in the peak flow rates or volumes that would exceed the drainage capacity of existing stormwater drainage

[47]Assumes a generation rate of 340 gallons per day for each multi-family residential unit and 300 gallons per day per 1,000 square feet for professional buildings. Los Angeles County Sanitation Districts, *Table 1, Loadings for Each Class of Land Use*, https://www.lacsd.org/home/showpublisheddocument/3644/637644575489800000, accessed July 2022.

facilities. New or expanded stormwater drainage facilities beyond those that would be installed by the Entertainment Retail Option would not be required, and the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Electric Power and Natural Gas Facilities.** The Entertainment Retail Option would be served by the same electric power and natural gas facilities as the Modified Project. The Entertainment Retail Option would be subject to the Cal Green Code, which would ensure that the Entertainment Retail Option would be energy efficient and, thus, reducing the need for new electrical power and natural gas infrastructure. No substantial electrical or natural gas infrastructure is present on or adjacent to the Project Site that would need to be relocated to accommodate the Entertainment Retail Option. Any necessary upgrades to the existing electrical and natural gas infrastructure to serve the Modified Project could be provided within and immediately surrounding the Project Site. The potential for impacts of these improvements has been considered throughout this addendum. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Construction of Telecommunications Facilities.** The Entertainment Retail Option would be served by the same telecommunications facilities as the Modified Project. The Entertainment Retail Option would potentially require additions of new on-site telecommunications infrastructure to serve the proposed new developments and potential upgrades and/or relocation of existing telecommunications infrastructure. Installation of new telecommunications infrastructure would be limited to on-site telecommunications distribution and minor off-site work associated with connections to the existing system. Thus, the Entertainment Retail Option would not require or result in the relocation or construction of new or expanded telecommunications facilities, the construction of which could cause significant environment effects. Any work that may affect services to the existing telecommunications lines would be coordinated with service providers and is not expected to cause significant environmental effects. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### *(b) Would the Project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?*

Water for the Project Site is served by Cal Water Dominguez District. The Dominguez District currently supplies a total of 32,968 acre-feet of water to its service area and is projected to supply a total of 32,937 acre-feet of water in 2045. Although the Dominguez District is projected to have a 7.7 percent increase in population, water demand is expected to decrease. This reduction in water demand is mostly due to the implementation of water use reduction programs and the rise of water-efficient plumbing fixtures.[48]

The Modified Project is estimated to increase water demand by approximately 189,490 gpd, or 212 acre feet per year, which represents less-than-one percent of the District's available water supply in 2045.[49] The Modified Project would be subject to water conservation standards in the CalGreen Code, including CalGreen Code Sections 4.303 and 4.304, which require indoor and outdoor water conservation measures to be implemented for residential development, such as low flush toilets, aerators on sinks and showerheads, water efficient appliances, and water-efficient automatic irrigation system controllers. The Modified Project would also comply with applicable water conservation policies in the General Plan Update and CARSONSCAPE, the City's MWELO. These regulations and policies would reduce overall water consumption. In the event of a water shortage,

[48]California Water Service, *2020 Urban Water Management Plan: Dominguez District*, June 2021.

[49]KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

Cal Water would implement its WSCP, which includes drought or supply interruption. Therefore, sufficient water supplies would be available to serve the Modified Project. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***Entertainment Retail Option***

The Entertainment Retail Option would be served by the same water supplier as the Modified Project. The Entertainment Retail Option is estimated to increase water demand by approximately 217,740 gpd, or 244 acre feet per year, which represents less-than-one percent of the Dominguez District's available water supply in 2045.[50] The Entertainment Retail Option would comply with CalGreen Code, the General Plan Update water conservation policies, and CARSONSCAPE. These regulations and policies would reduce overall water consumption. In the event of a water shortage, Cal Water would implement its WSCP. Therefore, sufficient water supplies would be available to serve the Entertainment Retail Option. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(c) Would the Project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

As discussed in the response to Checklist Question 3.19.2(a), the Modified Project is estimated to generate approximately 189,490 gpd of wastewater, which is less-than-one percent of the available capacity at the Warren Facility. The Warren Facility has sufficient remaining available treatment capacity to serve the Modified Project's projected demand in addition to its existing commitments. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

As discussed in the response to Checklist Question 3.19.2(a), the Entertainment Retail Option is estimated to generate approximately 217,740 gpd of wastewater, which is less-than-one percent of the available capacity at the Warren Facility. The Warren Facility has sufficient remaining available treatment capacity to serve the Entertainment Retail Option projected demand in addition to its existing commitments. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(d) Would the Project generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

The most recent landfill capacity data for the three landfills that serve the Project Site are presented in **Table 3-45**. These three landfills accept construction and demolition and inert waste. Chiquta Canyon Sanitary Landfill and El Sobrante Landfill also accept mixed municipal waste.

[50]KPFF Consulting Engineers, *Carson Civic Center Infrastructure Technical Report: Sewer, Storm Drain, and Water*, November 24, 2025.

**TABLE 3-45: LANDFILL CAPACITY**

| Landfill | Maximum Permitted Throughput (tons per day) | Remaining Capacity (cubic yards) | Maximum Permitted Capacity (cubic yards) |
|---|---|---|---|
| Chiquita Canyon Sanitary Landfill | 12,000 | 58,259,767 | 110,366,000 |
| El Sobrante Landfill | 16,054 | 121,083,583 | 209,910,000 |
| H.M. Holloway, Inc. | 2,000 | 3,777,340 | 8,350,000 |

**SOURCE:** CalRecycle, *SWIS Facility/Site Activity Details: Chiquita Canyon Sanitary Landfill (19-AA-0052)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3574?siteID=1037, accessed March 2025; CalRecycle,*SWIS Facility/Site Activity Details: El Sobrante Landfill (33-AA-0217)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/2280?siteID=2402, accessed March 2025; CalRecycle, *SWIS Facility/Site Activity Details: Lost Hills Environmental Waste Facility (15-AA-0308)*, https://www2.calrecycle.ca.gov/SolidWaste/SiteActivity/Details/3947?siteID=758, accessed March 2025.

The Modified Project is estimated to generate a total of approximately 650,425 cubic yards of solid waste during construction, which represents approximately 0.36 percent of the permitted daily intake capacity at the three landfills identified in **Table 3-45**. This estimate conservatively assumes that the entire Project Site, with the exception of the existing City Hall and a majority of the existing Community/Event Center, would be cleared and that up to two levels of subterranean parking would be located in the existing City Hall, Performing Arts Center, Mixed Use Housing, Existing Event Center, New City Hall, and Jewel Plaza Colonnade Parcels, as well as under the proposed open space areas. This analysis does not assume subterranean parking in the Hotel/Entertainment Retail Parcel. Despite this conservative analysis, it is likely that only some parcels on the Project Site would be excavated for subterranean parking and one level of subterranean parking may be constructed, which would result in less solid waste generation during construction. Landfills serving the Modified Project would have sufficient capacity to accommodate waste generated during construction of the Modified Project in addition to its existing commitments.

The Modified Project is estimated to generate approximately 2,633 tons of solid waste per year, or 7.2 tons of solid waste per day during operational activities,[51] which represents less than 0.1 percent of the permitted daily intake capacity at the three landfills identified in **Table 3-45**. Landfills serving the Modified Project would have sufficient throughput and capacity to accommodate waste generated during operations of the Modified Project in addition to its existing commitments.

Development associated with the Modified Project would be required to comply with solid waste regulations and General Plan Update policies that promote recycling, including CalGreen Code Section 4.408, which requires that at least 65 percent of demolition and construction debris be diverted from landfills by recycling and/or salvaged for reuse. Additionally, PRC Section 41780 requires jurisdictions to divert 50 percent of all solid waste on and after January 1, 2000, through source reduction, recycling, and composting activities. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### Entertainment Retail Option

The Entertainment Retail Option is estimated to generate a total of approximately 806,665 tons of solid waste during construction, which represents approximately 0.44 percent of the permitted daily

[51]Assumes a generation rate of 0.46 tons/dwelling unit/year for apartments, 00.03 tons/1,000 square feet for theater, 0.93 tons/square feet for government offices, 5.7 tons/1,000 square feet for government civic center (including museum), 11.9 tons/1,000 square feet for high turnover sit-down restaurants and retail, 0.55 tons/room for hotel, and 10.8 tons/1,000 square feet for hotel amenities. California Air Pollution Officers Association, *California Emissions Estimator Model (CalEEMod, Version 2016.3.2) Users Guide Appendix D Default Data Tables*, *Table 10.1. Solid Waste Disposal Rates*, October 2017.

intake capacity at the three landfills identified in **Table 3-45**. This estimate conservatively assumes that the entire Project Site, with the exception of the existing City Hall and a majority of the existing Community/Event Center, would be cleared and that up to two levels of subterranean parking would be located under the entire Project Site. However, it is likely that only a portion of the Project Site would be excavated for subterranean parking and one level of subterranean parking may be constructed, which would result in less solid waste generation during construction. Landfills serving the Entertainment Retail Option would have sufficient throughput and capacity to accommodate waste generated during construction of the Entertainment Retail Option in addition to its existing commitments.

The Entertainment Retail Option is estimated to generate approximately 2,948 tons of solid waste per year, or 8.1 tons of solid waste per day during operational activities,[52] which represents less than 0.1 percent of the permitted daily intake capacity at the three landfills identified in **Table 3-45**. Landfills serving the Entertainment Retail Option would have sufficient throughput and capacity to accommodate waste generated during operations of the Entertainment Retail Option in addition to its existing commitments. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

***(e) Would the Project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?***

The Modified Project would be required to comply with AB 939, AB 341, and SB 1383. The Modified Project would also be required to comply with CalGreen Code Section 4.408 and PRC Section 41780.01(a). Cal Green Code Section 4.408 requires that at least 65 percent of demolition and construction debris be diverted from landfills by recycling and/or salvage for reuse. PRC Section 41780.01(a) states that it is California's policy goal to reduce, recycle, or compost at least 75 percent of solid waste generated by 2020, and annually thereafter. The Modified Project would be required to comply with these and other applicable regulations related to solid waste, in addition to the General Plan Update policies pertaining to solid waste reduction. Therefore, the Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would comply with all applicable federal, state, and local management and reduction statues and regulations related to solid waste, including AB 939, AB 341, SB 1383, CalGreen Code Section 4.408, PRC Section 41780.01(a), and the General Plan Update policies. Therefore, the Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.19.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

[52]Assumes a generation rate of 0.46 tons/dwelling unit/year for apartments, 00.03 tons/1,000 square feet for theater, 0.93 tons/square feet for government offices, 5.7 tons/1,000 square feet for government civic center (including museum), 11.9 tons/1,000 square feet for high turnover sit-down restaurants (including sports bar at entertainment retail center), and 1.05 tons/square feet for regional shopping center (entertainment retail). California Air Pollution Officers Association, *California Emissions Estimator Model (CalEEMod, Version 2016.3.2) Users Guide Appendix D Default Data Tables*, *Table 10.1. Solid Waste Disposal Rates*, October 2017.

### 3.19.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.19.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.19.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

# 3.20 WILDFIRE

| Issues (and supporting Information Sources) | Impact Determination in the Certified EIR | Do Proposed Changes Involve New Significant Impacts or Substantially More Severe Impacts? | Any New Circumstances Involving New Significant Impact or Substantially More Severe Impacts? | Any New Information Requiring New Analysis or Verification? | Certified EIR's Mitigation Measures Addressing Impacts |
|---|---|---|---|---|---|
| **WILDLIFE**. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project: | | | | | |
| (a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | No Impact | No | No | No | No |
| (b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | No Impact | No | No | No | No |
| (c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | No Impact | No | No | No | No |
| (d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | No Impact | No | No | No | No |

## 3.20.1 IMPACT DETERMINATION IN THE EIR

***(a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?***

***(b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

***(c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

***(d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage change?***

As discussed in the Certified EIR, California Department of Forestry and Fire Protection (CAL FIRE) provides maps of the State Responsibility Area (SRA) Fire Hazard Severity Zones (FHSZs), or

areas of significant fire hazard, based on fuels, terrain, weather, and the likelihood of buildings igniting. CAL FIRE Zones are designated with Very High, High, Moderate, and Other which includes Non-Wildland/Urban and Urban Unzoned hazard classes. The goal of this mapping effort is to create more accurate fire hazard zone designations such that mitigation strategies are implemented in areas where hazards warrant these investments. The fire hazard zones will provide specific designation for application of defensible space and building standards consistent with known mechanisms of fire risk to people, property, and natural resources.

The Planning Area is not located within or near an SRA and is not it classified as a very high fire hazard severity zone (VHFHSZ) or located near a VHFHSZ. The Planning Area is located within a Local Responsibility Area (LRA) in a highly urbanized environment that is far from areas with high wildfire risk. Therefore, wildfire risk in the Planning Area is negligible. The Certified EIR concluded that no impacts would occur.

**General Plan Update Policies that Address Wildfire**

None.

**Mitigation Measures**

None required.

### 3.20.2 DO PROPOSED CHANGES INVOLVE NEW SIGNIFICANT IMPACTS OR SUBSTANTIALLY MORE SEVERE IMPACTS?

***(a) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project substantially impair an adopted emergency response plan or emergency evacuation plan?***

***(b) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project due to slope, prevailing winds, and other factors, exacerbate wildfire risks, thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?***

***(c) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?***

***(d) If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the Project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff post-fire slope instability, or drainage change?***

The Project Site is not located in or near an SRA or in a VHFHSZ, as identified by CalFire. The nearest VHFHSZ is located approximately 4.5 miles southwest of the Project Site [53] The Project Site is located in a highly urbanized environment that is far from areas with high wildfire risk. It is also located in a relatively flat area. Therefore, the Modified Project is not expected to result in wildfire risks that would impair an adopted emergency response or evacuation plan or expose

[53]California Department of Forestry and Fire Protection, *California Fire Hazard Severity Zone Viewer*, https://experience.arcgis.com/experience/03beab8511814e79a0e4eabf0d3e7247/, accessed March 2025.

people or structures to post-wildfire hazards. The Modified Project would not result in new or increased significant impacts beyond those identified in the Certified EIR.

**Entertainment Retail Option**

The Entertainment Retail Option would be located on the same site as the Modified Project, which is not within or near an SRA or VHFHSZ. Therefore, the Entertainment Retail Option is not expected to result in wildfire risks that would impair an adopted emergency response or evacuation plan or expose people or structures to post-wildfire hazards. The Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR.

### 3.20.3 ANY NEW CIRCUMSTANCES INVOLVING NEW SIGNIFICANT IMPACT OR SUBSTANTIALLY MORE SEVERE IMPACTS?

**No**. As discussed above, the Modified Project and its Entertainment Retail Option would not result in any new or more severe significant impacts beyond what were identified in the Certified EIR.

### 3.20.4 ANY NEW INFORMATION REQUIRING NEW ANALYSIS OR VERIFICATION?

**No**. There is no new information requiring new analysis or verification.

### 3.20.5 EIR'S MITIGATION MEASURES ADDRESSING IMPACT

None required.

### 3.20.6 CONCLUSION

As discussed above, the Modified Project and its Entertainment Retail Option would not result in any of the conditions set forth in PRC Section 21166(c) or CEQA Guidelines Sections 15162 or 15163 that would require the preparation of a Supplemental or Subsequent EIR.

## 3.21 ADDENDUM CONCLUSION

As demonstrated by the discussion above, impacts associated with the Modified Project and its Entertainment Retail Option would be similar to or less than the impacts addressed in the Certified EIR. With implementation of **Mitigation Measures AES-1**, **NOI-1**, **NOI-2**, **NOI-3**, **NOI-4** (for the Entertainment Retail Option only), and **TRA-1**, the Modified Project and its Entertainment Retail Option would not result in new or increased significant impacts beyond those identified in the Certified EIR. No substantial changes would occur with respect to the circumstances under which the Modified Project and its Entertainment Retail Option is undertaken that will require major revisions of the Certified EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects. In addition, no new information of substantial importance has become available relative to any of the environmental topic categories that would result in in new or more severe significant environmental impacts. The applicable mitigation measures included as part of the Certified EIR would continue to be implemented under the Modified Project and its Entertainment Retail Option. As all of the impacts of the Modified Project and its Entertainment Retail Option would be within the envelope of impacts analyzed in the Certified EIR, none of the conditions described in PRC Section 21166 and CEQA Guidelines Sections 15162 and 15163 requiring a Supplemental or Subsequent EIR would occur. Additionally, there are no known mitigation measures or project alternatives that were previously considered infeasible but are now considered feasible that would substantially reduce one or more significant effects on the environment identified in the Certified EIR. Therefore, the Modified Project and its Entertainment Retail Option would not create any potential adverse impacts beyond those evaluated in the Certified EIR. As such, the preparation of an addendum is appropriate and fully complies with the requirements of PRC Section 21166 and CEQA Guidelines Sections 15162, 15163, and 15164.

# Appendix A

## Air Quality and Greenhouse Gas Emissions Calculations

# Air Quality and Greenhouse Gas Emissions

California Emissions Estimator Model (CalEEMod) Output Reports

- Proposed Specific Plan (Construction & 2050 Operations)
- Entertainment/Retail Complex Option (Construction & 2050 Operations)
- Existing Conditions Operations

Emissions Calculation Sheets

- Daily Construction Emissions
- Total Construction GHG Emissions
- Annual Operational GHG Emissions – Proposed Specific Plan
- Annual Operational GHG Emissions – Entertainment Retail Option
- Annual Operational GHG Emissions – Existing Conditions
- EMFAC2021 Operational Mobile Source Emissions Calculations

# CalEEMod – Proposed Specific Plan

# Carson Civic Center Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Carson Civic Center |
| Construction Start Date | 6/1/2026 |
| Operational Year | 2050 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.5 |
| Precipitation (days) | 17 |
| Location | 33.83254920370301, -118.26290983813647 |
| County | Los Angeles-South Coast |
| City | Carson |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4617 |
| EDFZ | 7 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |
| App Version | 2022.1.1.35 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 64 | 1000sqft | 2.5 | 64,000 | 43,308 | 0.00 | — | Existing City Hall Reno |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 187 | 1000sqft | 1.8 | 187,000 | 37,023 | 0.00 | — | New City Hall |
| Arena | 124 | 1000sqft | 3.7 | 124,000 | 70,625 | 0.00 | — | Performing Arts Center |
| High Turnover (Sit Down Restaurant) | 10.0 | 1000sqft | 0.00 | 10,000 | 0.00 | 0.00 | — | New City Hall Restaurant |
| Enclosed Parking with Elevator | 251 | 1000sqft | 0.00 | 251,000 | 0.00 | 0.00 | — | Sub Pkg Level |
| Unenclosed Parking with Elevator | 240 | 1000sqft | 0.00 | 240,000 | 0.00 | 0.00 | — | M-U Podium Pkg |
| Hotel | 420 | Room | 3.8 | 220,000 | 13,800 | 0.00 | — | Hotel |
| Unenclosed Parking with Elevator | 140 | 1000sqft | 0.00 | 140,000 | 0.00 | 0.00 | — | Hotel Podium Parking |
| Apartments Mid Rise | 140 | Dwelling Unit | 1.5 | 134,400 | 5,610 | 0.00 | 300 | M-U Housing |
| Government (Civic Center) | 90 | 1000sqft | 3.8 | 90,000 | 86,275 | 0.00 | — | Ex Events Center Reno |
| High Turnover (Sit Down Restaurant) | 20 | 1000sqft | 0.00 | 20,000 | 0.00 | 0.00 | — | Hotel Restaurant |
| Other Asphalt Surfaces | 0.70 | Acre | 0.70 | 0.00 | 0.00 | 0.00 | — | Internal Street |
| Other Non-Asphalt Surfaces | 2.0 | Acre | 1.8 | 0.00 | 0.00 | 0.00 | — | Hardscape |
| Unenclosed Parking with Elevator | 60 | 1000sqft | 0.00 | 60,000 | 0.00 | 0.00 | — | Bus Depot |
| Library | 25 | 1000sqft | 0.50 | 25,000 | 0.00 | 0.00 | — | Interactive Museum |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-2* | Limit Heavy-Duty Diesel Vehicle Idling |

| | | |
|---|---|---|
| Construction | C-4* | Use Local and Sustainable Building Materials |
| Transportation | T-31-B* | Improve Destination Accessibility in Underserved Areas |
| Transportation | T-34* | Provide Bike Parking |
| Transportation | T-46* | Provide Transit Shelters |
| Energy | E-1 | Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards |
| Energy | E-2 | Require Energy Efficient Appliances |
| Energy | E-3-A* | Require Energy Efficient Residential Boilers |
| Energy | E-3-B* | Require Energy Efficient Commercial Packaged Boilers |
| Energy | E-12-A | Install Alternative Type of Water Heater in Place of Gas Storage Tank Heater in Residences |
| Energy | E-12-B | Install Electric Space Heater in Place of Natural Gas Heaters in Residences |
| Energy | E-13 | Install Electric Ranges in Place of Gas Ranges |
| Energy | E-21* | Install Cool Pavement |
| Water | W-4 | Require Low-Flow Water Fixtures |
| Water | W-5 | Design Water-Efficient Landscapes |

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 69 | 94 | 125 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.5 | 6.6 | — | 49,935 | 49,935 | 2.2 | 4.9 | 90 | 51,545 |
| Mit. | 69 | 94 | 125 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.5 | 6.6 | — | 49,935 | 49,935 | 2.2 | 4.9 | 90 | 51,545 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 69 | 96 | 119 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.3 | 6.5 | — | 49,534 | 49,534 | 2.0 | 4.9 | 2.3 | 51,053 |
| Mit. | 69 | 96 | 119 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.3 | 6.5 | — | 49,534 | 49,534 | 2.0 | 4.9 | 2.3 | 51,053 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 24 | 45 | 56 | 0.15 | 1.1 | 8.3 | 9.4 | 1.0 | 1.9 | 3.0 | — | 22,552 | 22,552 | 0.88 | 2.0 | 18 | 23,203 |
| Mit. | 24 | 45 | 56 | 0.15 | 1.1 | 8.3 | 9.4 | 1.0 | 1.9 | 3.0 | — | 22,552 | 22,552 | 0.88 | 2.0 | 18 | 23,203 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.4 | 8.3 | 10 | 0.03 | 0.20 | 1.5 | 1.7 | 0.19 | 0.36 | 0.54 | — | 3,734 | 3,734 | 0.15 | 0.34 | 2.9 | 3,841 |
| Mit. | 4.4 | 8.3 | 10 | 0.03 | 0.20 | 1.5 | 1.7 | 0.19 | 0.36 | 0.54 | — | 3,734 | 3,734 | 0.15 | 0.34 | 2.9 | 3,841 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Exceeds (Daily Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 75 | 100 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Exceeds (Average Daily) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 75 | 100 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 7.3 | 79 | 82 | 0.23 | 2.3 | 15 | 18 | 2.2 | 4.5 | 6.6 | — | 34,107 | 34,107 | 1.7 | 3.4 | 59 | 35,212 |
| 2027 | 9.4 | 94 | 116 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.3 | 6.5 | — | 49,935 | 49,935 | 2.2 | 4.9 | 90 | 51,545 |
| 2028 | 69 | 82 | 125 | 0.28 | 2.0 | 16 | 18 | 1.9 | 3.7 | 5.6 | — | 41,953 | 41,953 | 1.4 | 3.0 | 67 | 42,943 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 3.5 | 45 | 44 | 0.16 | 1.1 | 9.0 | 10 | 1.1 | 2.3 | 3.2 | — | 23,966 | 23,966 | 1.2 | 2.8 | 1.2 | 24,826 |
| 2027 | 9.3 | 96 | 111 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.3 | 6.5 | — | 49,534 | 49,534 | 2.0 | 4.9 | 2.3 | 51,053 |
| 2028 | 69 | 83 | 119 | 0.28 | 2.0 | 16 | 18 | 1.9 | 3.7 | 5.6 | — | 41,475 | 41,475 | 1.4 | 3.0 | 1.7 | 42,403 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.7 | 20 | 19 | 0.06 | 0.55 | 3.8 | 4.3 | 0.51 | 1.0 | 1.5 | — | 8,863 | 8,863 | 0.44 | 0.93 | 6.9 | 9,157 |
| 2027 | 4.7 | 45 | 56 | 0.15 | 1.1 | 8.3 | 9.4 | 1.0 | 1.9 | 3.0 | — | 22,552 | 22,552 | 0.88 | 2.0 | 18 | 23,203 |
| 2028 | 24 | 23 | 34 | 0.08 | 0.55 | 4.4 | 5.0 | 0.51 | 1.1 | 1.6 | — | 11,769 | 11,769 | 0.41 | 0.88 | 8.4 | 12,051 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.31 | 3.6 | 3.6 | 0.01 | 0.10 | 0.69 | 0.79 | 0.09 | 0.19 | 0.28 | — | 1,467 | 1,467 | 0.07 | 0.15 | 1.1 | 1,516 |
| 2027 | 0.86 | 8.3 | 10 | 0.03 | 0.20 | 1.5 | 1.7 | 0.19 | 0.36 | 0.54 | — | 3,734 | 3,734 | 0.15 | 0.34 | 2.9 | 3,841 |
| 2028 | 4.4 | 4.3 | 6.1 | 0.01 | 0.10 | 0.81 | 0.91 | 0.09 | 0.19 | 0.29 | — | 1,949 | 1,949 | 0.07 | 0.15 | 1.4 | 1,995 |

## 2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 7.3 | 79 | 82 | 0.23 | 2.3 | 15 | 18 | 2.2 | 4.5 | 6.6 | — | 34,107 | 34,107 | 1.7 | 3.4 | 59 | 35,212 |
| 2027 | 9.4 | 94 | 116 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.3 | 6.5 | — | 49,935 | 49,935 | 2.2 | 4.9 | 90 | 51,545 |
| 2028 | 69 | 82 | 125 | 0.28 | 2.0 | 16 | 18 | 1.9 | 3.7 | 5.6 | — | 41,953 | 41,953 | 1.4 | 3.0 | 67 | 42,943 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 3.5 | 45 | 44 | 0.16 | 1.1 | 9.0 | 10 | 1.1 | 2.3 | 3.2 | — | 23,966 | 23,966 | 1.2 | 2.8 | 1.2 | 24,826 |
| 2027 | 9.3 | 96 | 111 | 0.34 | 2.3 | 19 | 21 | 2.2 | 4.3 | 6.5 | — | 49,534 | 49,534 | 2.0 | 4.9 | 2.3 | 51,053 |
| 2028 | 69 | 83 | 119 | 0.28 | 2.0 | 16 | 18 | 1.9 | 3.7 | 5.6 | — | 41,475 | 41,475 | 1.4 | 3.0 | 1.7 | 42,403 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.7 | 20 | 19 | 0.06 | 0.55 | 3.8 | 4.3 | 0.51 | 1.0 | 1.5 | — | 8,863 | 8,863 | 0.44 | 0.93 | 6.9 | 9,157 |
| 2027 | 4.7 | 45 | 56 | 0.15 | 1.1 | 8.3 | 9.4 | 1.0 | 1.9 | 3.0 | — | 22,552 | 22,552 | 0.88 | 2.0 | 18 | 23,203 |
| 2028 | 24 | 23 | 34 | 0.08 | 0.55 | 4.4 | 5.0 | 0.51 | 1.1 | 1.6 | — | 11,769 | 11,769 | 0.41 | 0.88 | 8.4 | 12,051 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.31 | 3.6 | 3.6 | 0.01 | 0.10 | 0.69 | 0.79 | 0.09 | 0.19 | 0.28 | — | 1,467 | 1,467 | 0.07 | 0.15 | 1.1 | 1,516 |
| 2027 | 0.86 | 8.3 | 10 | 0.03 | 0.20 | 1.5 | 1.7 | 0.19 | 0.36 | 0.54 | — | 3,734 | 3,734 | 0.15 | 0.34 | 2.9 | 3,841 |
| 2028 | 4.4 | 4.3 | 6.1 | 0.01 | 0.10 | 0.81 | 0.91 | 0.09 | 0.19 | 0.29 | — | 1,949 | 1,949 | 0.07 | 0.15 | 1.4 | 1,995 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 31 | 10 | 82 | 0.06 | 0.68 | 0.00 | 0.68 | 0.65 | 0.00 | 0.65 | 1,573 | 20,273 | 21,846 | 160 | 0.57 | 393 | 26,404 |
| Mit. | 31 | 10 | 82 | 0.06 | 0.68 | 0.00 | 0.68 | 0.65 | 0.00 | 0.65 | 1,557 | 19,986 | 21,543 | 158 | 0.52 | 393 | 26,045 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Reduced | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 1% | 1% | 1% | 1% | 8% | — | 1% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 20 | 9.6 | 12 | 0.05 | 0.57 | 0.00 | 0.57 | 0.57 | 0.00 | 0.57 | 1,573 | 19,996 | 21,569 | 160 | 0.56 | 393 | 26,125 |
| Mit. | 20 | 9.6 | 12 | 0.05 | 0.57 | 0.00 | 0.57 | 0.56 | 0.00 | 0.56 | 1,557 | 19,709 | 21,266 | 158 | 0.52 | 393 | 25,767 |
| % Reduced | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 1% | 1% | 1% | 1% | 8% | — | 1% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 28 | 9.3 | 58 | 0.05 | 0.64 | 0.00 | 0.64 | 0.62 | 0.00 | 0.62 | 1,573 | 19,923 | 21,496 | 160 | 0.56 | 393 | 26,052 |
| Mit. | 28 | 9.3 | 58 | 0.05 | 0.64 | 0.00 | 0.64 | 0.62 | 0.00 | 0.62 | 1,557 | 19,636 | 21,193 | 158 | 0.52 | 393 | 25,693 |
| % Reduced | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 1% | 1% | 1% | 1% | 8% | — | 1% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 5.1 | 1.7 | 11 | 0.01 | 0.12 | 0.00 | 0.12 | 0.11 | 0.00 | 0.11 | 260 | 3,298 | 3,559 | 26 | 0.09 | 65 | 4,313 |
| Mit. | 5.1 | 1.7 | 11 | 0.01 | 0.12 | 0.00 | 0.12 | 0.11 | 0.00 | 0.11 | 258 | 3,251 | 3,509 | 26 | 0.09 | 65 | 4,254 |
| % Reduced | < 0.5% | < 0.5% | < 0.5% | < 0.5% | < 0.5% | — | < 0.5% | < 0.5% | — | < 0.5% | 1% | 1% | 1% | 1% | 8% | — | 1% |
| Exceeds (Daily Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 55 | 55 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Exceeds (Average Daily) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 55 | 55 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 31 | 0.60 | 70 | < 0.005 | 0.11 | — | 0.11 | 0.09 | — | 0.09 | — | 277 | 277 | 0.01 | < 0.005 | — | 278 |
| Energy | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 18,674 | 18,674 | 2.0 | 0.17 | — | 18,777 |
| Water | — | — | — | — | — | — | — | — | — | — | 155 | 407 | 562 | 16 | 0.38 | — | 1,074 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 31 | 10 | 82 | 0.06 | 0.68 | 0.00 | 0.68 | 0.65 | 0.00 | 0.65 | 1,573 | 20,273 | 21,846 | 160 | 0.57 | 393 | 26,404 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 20 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 18,674 | 18,674 | 2.0 | 0.17 | — | 18,777 |
| Water | — | — | — | — | — | — | — | — | — | — | 155 | 407 | 562 | 16 | 0.38 | — | 1,074 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 20 | 9.6 | 12 | 0.05 | 0.57 | 0.00 | 0.57 | 0.57 | 0.00 | 0.57 | 1,573 | 19,996 | 21,569 | 160 | 0.56 | 393 | 26,125 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 27 | 0.41 | 48 | < 0.005 | 0.08 | — | 0.08 | 0.06 | — | 0.06 | — | 190 | 190 | 0.01 | < 0.005 | — | 191 |
| Energy | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 18,674 | 18,674 | 2.0 | 0.17 | — | 18,777 |
| Water | — | — | — | — | — | — | — | — | — | — | 155 | 407 | 562 | 16 | 0.38 | — | 1,074 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Off-Road | 0.19 | 1.8 | 4.4 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 652 | 652 | 0.03 | 0.01 | — | 654 |
| Total | 28 | 9.3 | 58 | 0.05 | 0.64 | 0.00 | 0.64 | 0.62 | 0.00 | 0.62 | 1,573 | 19,923 | 21,496 | 160 | 0.56 | 393 | 26,052 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 5.0 | 0.07 | 8.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31 | 31 | < 0.005 | < 0.005 | — | 32 |
| Energy | 0.07 | 1.3 | 1.1 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 3,092 | 3,092 | 0.34 | 0.03 | — | 3,109 |
| Water | — | — | — | — | — | — | — | — | — | — | 26 | 67 | 93 | 2.6 | 0.06 | — | 178 |
| Waste | — | — | — | — | — | — | — | — | — | — | 235 | 0.00 | 235 | 23 | 0.00 | — | 822 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 65 | 65 |
| Off-Road | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 5.1 | 1.7 | 11 | 0.01 | 0.12 | 0.00 | 0.12 | 0.11 | 0.00 | 0.11 | 260 | 3,298 | 3,559 | 26 | 0.09 | 65 | 4,313 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 31 | 0.60 | 70 | < 0.005 | 0.11 | — | 0.11 | 0.09 | — | 0.09 | — | 277 | 277 | 0.01 | < 0.005 | — | 278 |
| Energy | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 18,428 | 18,428 | 2.0 | 0.17 | — | 18,529 |
| Water | — | — | — | — | — | — | — | — | — | — | 139 | 366 | 505 | 14 | 0.34 | — | 964 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 31 | 10 | 82 | 0.06 | 0.68 | 0.00 | 0.68 | 0.65 | 0.00 | 0.65 | 1,557 | 19,986 | 21,543 | 158 | 0.52 | 393 | 26,045 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 20 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 18,428 | 18,428 | 2.0 | 0.17 | — | 18,529 |
| Water | — | — | — | — | — | — | — | — | — | — | 139 | 366 | 505 | 14 | 0.34 | — | 964 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 20 | 9.6 | 12 | 0.05 | 0.57 | 0.00 | 0.57 | 0.56 | 0.00 | 0.56 | 1,557 | 19,709 | 21,266 | 158 | 0.52 | 393 | 25,767 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 27 | 0.41 | 48 | < 0.005 | 0.08 | — | 0.08 | 0.06 | — | 0.06 | — | 190 | 190 | 0.01 | < 0.005 | — | 191 |
| Energy | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 18,428 | 18,428 | 2.0 | 0.17 | — | 18,529 |
| Water | — | — | — | — | — | — | — | — | — | — | 139 | 366 | 505 | 14 | 0.34 | — | 964 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Off-Road | 0.19 | 1.8 | 4.4 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 652 | 652 | 0.03 | 0.01 | — | 654 |
| Total | 28 | 9.3 | 58 | 0.05 | 0.64 | 0.00 | 0.64 | 0.62 | 0.00 | 0.62 | 1,557 | 19,636 | 21,193 | 158 | 0.52 | 393 | 25,693 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 5.0 | 0.07 | 8.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31 | 31 | < 0.005 | < 0.005 | — | 32 |
| Energy | 0.07 | 1.3 | 1.1 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 3,051 | 3,051 | 0.33 | 0.03 | — | 3,068 |
| Water | — | — | — | — | — | — | — | — | — | — | 23 | 61 | 84 | 2.4 | 0.06 | — | 160 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Waste | — | — | — | — | — | — | — | — | — | — | 235 | 0.00 | 235 | 23 | 0.00 | — | 822 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 65 | 65 |
| Off-Road | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 5.1 | 1.7 | 11 | 0.01 | 0.12 | 0.00 | 0.12 | 0.11 | 0.00 | 0.11 | 258 | 3,251 | 3,509 | 26 | 0.09 | 65 | 4,254 |

# 3. Construction Emissions Details

## 3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.4 | 32 | 30 | 0.06 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 5,987 | 5,987 | 0.24 | 0.05 | — | 6,007 |
| Dust From Material Movement | — | — | — | — | — | 2.1 | 2.1 | — | 0.92 | 0.92 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.44 | 0.44 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.74 | 0.74 | < 0.005 | 0.07 | 0.07 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.61 | 5.7 | 5.4 | 0.01 | 0.22 | — | 0.22 | 0.20 | — | 0.20 | — | 1,066 | 1,066 | 0.04 | 0.01 | — | 1,070 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.38 | 0.38 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.08 | 0.08 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.13 | 0.13 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 1.0 | 0.98 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 177 | 177 | 0.01 | < 0.005 | — | 177 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | < 0.005 | 0.14 | 0.07 | < 0.005 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 125 | 125 | 0.01 | 0.02 | 0.34 | 130 |
| Hauling | 0.13 | 9.8 | 3.9 | 0.06 | 0.11 | 2.2 | 2.3 | 0.11 | 0.61 | 0.71 | — | 8,163 | 8,163 | 0.45 | 1.3 | 18 | 8,581 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 22 | 22 | < 0.005 | < 0.005 | 0.03 | 23 |
| Hauling | 0.02 | 1.8 | 0.69 | 0.01 | 0.02 | 0.39 | 0.41 | 0.02 | 0.11 | 0.13 | — | 1,454 | 1,454 | 0.08 | 0.23 | 1.4 | 1,526 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 3.7 | 3.7 | < 0.005 | < 0.005 | < 0.005 | 3.8 |
| Hauling | < 0.005 | 0.34 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.08 | < 0.005 | 0.02 | 0.02 | — | 241 | 241 | 0.01 | 0.04 | 0.23 | 253 |

## 3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.4 | 32 | 30 | 0.06 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 5,987 | 5,987 | 0.24 | 0.05 | — | 6,007 |
| Dust From Material Movement | — | — | — | — | — | 2.1 | 2.1 | — | 0.92 | 0.92 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.44 | 0.44 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.74 | 0.74 | < 0.005 | 0.07 | 0.07 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.61 | 5.7 | 5.4 | 0.01 | 0.22 | — | 0.22 | 0.20 | — | 0.20 | — | 1,066 | 1,066 | 0.04 | 0.01 | — | 1,070 |
| Dust From Material Movement | — | — | — | — | — | 0.38 | 0.38 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | — | — | — | — | — | 0.08 | 0.08 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.13 | 0.13 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 1.0 | 0.98 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 177 | 177 | 0.01 | < 0.005 | — | 177 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | < 0.005 | 0.14 | 0.07 | < 0.005 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 125 | 125 | 0.01 | 0.02 | 0.34 | 130 |
| Hauling | 0.13 | 9.8 | 3.9 | 0.06 | 0.11 | 2.2 | 2.3 | 0.11 | 0.61 | 0.71 | — | 8,163 | 8,163 | 0.45 | 1.3 | 18 | 8,581 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 22 | 22 | < 0.005 | < 0.005 | 0.03 | 23 |
| Hauling | 0.02 | 1.8 | 0.69 | 0.01 | 0.02 | 0.39 | 0.41 | 0.02 | 0.11 | 0.13 | — | 1,454 | 1,454 | 0.08 | 0.23 | 1.4 | 1,526 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 3.7 | 3.7 | < 0.005 | < 0.005 | < 0.005 | 3.8 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | < 0.005 | 0.34 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.08 | < 0.005 | 0.02 | 0.02 | — | 241 | 241 | 0.01 | 0.04 | 0.23 | 253 |

## 3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.4 | 22 | 22 | 0.04 | 0.85 | — | 0.85 | 0.78 | — | 0.78 | — | 4,095 | 4,095 | 0.17 | 0.03 | — | 4,109 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.74 | 0.74 | < 0.005 | 0.07 | 0.07 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.4 | 22 | 22 | 0.04 | 0.85 | — | 0.85 | 0.78 | — | 0.78 | — | 4,095 | 4,095 | 0.17 | 0.03 | — | 4,109 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.74 | 0.74 | < 0.005 | 0.07 | 0.07 | — | 10 | 10 | < 0.005 | < 0.005 | < 0.005 | 11 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.43 | 3.9 | 3.9 | 0.01 | 0.15 | — | 0.15 | 0.14 | — | 0.14 | — | 729 | 729 | 0.03 | 0.01 | — | 732 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.33 | 0.33 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.13 | 0.13 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.71 | 0.72 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 121 | 121 | < 0.005 | < 0.005 | — | 121 |
| Dust From Material Movement | — | — | — | — | — | 0.06 | 0.06 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | 0.01 | 0.55 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 1.3 | 522 |
| Hauling | 0.17 | 13 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,883 | 10,883 | 0.60 | 1.7 | 24 | 11,441 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.70 | 8.8 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,055 | 2,055 | 0.09 | 0.08 | 0.19 | 2,080 |
| Vendor | 0.01 | 0.58 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 0.03 | 521 |
| Hauling | 0.16 | 14 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,888 | 10,888 | 0.60 | 1.7 | 0.63 | 11,422 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.10 | 0.05 | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 89 | 89 | < 0.005 | 0.01 | 0.10 | 93 |
| Hauling | 0.03 | 2.5 | 0.92 | 0.01 | 0.03 | 0.52 | 0.55 | 0.03 | 0.14 | 0.17 | — | 1,938 | 1,938 | 0.11 | 0.31 | 1.9 | 2,035 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.02 | 15 |
| Hauling | 0.01 | 0.45 | 0.17 | < 0.005 | < 0.005 | 0.10 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 321 | 321 | 0.02 | 0.05 | 0.31 | 337 |

## 3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.4 | 22 | 22 | 0.04 | 0.85 | — | 0.85 | 0.78 | — | 0.78 | — | 4,095 | 4,095 | 0.17 | 0.03 | — | 4,109 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.74 | 0.74 | < 0.005 | 0.07 | 0.07 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.4 | 22 | 22 | 0.04 | 0.85 | — | 0.85 | 0.78 | — | 0.78 | — | 4,095 | 4,095 | 0.17 | 0.03 | — | 4,109 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.74 | 0.74 | < 0.005 | 0.07 | 0.07 | — | 10 | 10 | < 0.005 | < 0.005 | < 0.005 | 11 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.43 | 3.9 | 3.9 | 0.01 | 0.15 | — | 0.15 | 0.14 | — | 0.14 | — | 729 | 729 | 0.03 | 0.01 | — | 732 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.33 | 0.33 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.13 | 0.13 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.71 | 0.72 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 121 | 121 | < 0.005 | < 0.005 | — | 121 |
| Dust From Material Movement | — | — | — | — | — | 0.06 | 0.06 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | 0.01 | 0.55 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 1.3 | 522 |
| Hauling | 0.17 | 13 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,883 | 10,883 | 0.60 | 1.7 | 24 | 11,441 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.70 | 8.8 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,055 | 2,055 | 0.09 | 0.08 | 0.19 | 2,080 |
| Vendor | 0.01 | 0.58 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 0.03 | 521 |
| Hauling | 0.16 | 14 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,888 | 10,888 | 0.60 | 1.7 | 0.63 | 11,422 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.10 | 0.05 | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 89 | 89 | < 0.005 | 0.01 | 0.10 | 93 |
| Hauling | 0.03 | 2.5 | 0.92 | 0.01 | 0.03 | 0.52 | 0.55 | 0.03 | 0.14 | 0.17 | — | 1,938 | 1,938 | 0.11 | 0.31 | 1.9 | 2,035 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.02 | 15 |
| Hauling | 0.01 | 0.45 | 0.17 | < 0.005 | < 0.005 | 0.10 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 321 | 321 | 0.02 | 0.05 | 0.31 | 337 |

## 3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.5 | 23 | 25 | 0.05 | 0.93 | — | 0.93 | 0.85 | — | 0.85 | — | 4,799 | 4,799 | 0.19 | 0.04 | — | 4,815 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.15 | 0.15 | — | 17 | 17 | < 0.005 | < 0.005 | < 0.005 | 18 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.30 | 2.7 | 2.9 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 563 | 563 | 0.02 | < 0.005 | — | 565 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.17 | 0.17 | < 0.005 | 0.02 | 0.02 | — | 2.0 | 2.0 | < 0.005 | < 0.005 | < 0.005 | 2.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.05 | 0.50 | 0.53 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 93 | 93 | < 0.005 | < 0.005 | — | 94 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.34 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.73 | 0.87 | 11 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,569 | 2,569 | 0.12 | 0.09 | 0.24 | 2,600 |
| Vendor | 0.01 | 0.29 | 0.14 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 250 | 250 | 0.01 | 0.04 | 0.02 | 260 |
| Hauling | 0.24 | 20 | 7.8 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,332 | 16,332 | 0.90 | 2.6 | 0.95 | 17,133 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.11 | 1.4 | 0.00 | 0.00 | 0.30 | 0.30 | 0.00 | 0.07 | 0.07 | — | 306 | 306 | 0.01 | 0.01 | 0.47 | 310 |
| Vendor | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 29 | 29 | < 0.005 | < 0.005 | 0.03 | 31 |
| Hauling | 0.03 | 2.4 | 0.91 | 0.01 | 0.02 | 0.52 | 0.54 | 0.02 | 0.14 | 0.17 | — | 1,917 | 1,917 | 0.11 | 0.31 | 1.8 | 2,013 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.25 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 51 | 51 | < 0.005 | < 0.005 | 0.08 | 51 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |
| Hauling | 0.01 | 0.44 | 0.17 | < 0.005 | < 0.005 | 0.09 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 317 | 317 | 0.02 | 0.05 | 0.31 | 333 |

## 3.6. Grading (2026) - Mitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.5 | 23 | 25 | 0.05 | 0.93 | — | 0.93 | 0.85 | — | 0.85 | — | 4,799 | 4,799 | 0.19 | 0.04 | — | 4,815 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.15 | 0.15 | — | 17 | 17 | < 0.005 | < 0.005 | < 0.005 | 18 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.30 | 2.7 | 2.9 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 563 | 563 | 0.02 | < 0.005 | — | 565 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.17 | 0.17 | < 0.005 | 0.02 | 0.02 | — | 2.0 | 2.0 | < 0.005 | < 0.005 | < 0.005 | 2.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.50 | 0.53 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 93 | 93 | < 0.005 | < 0.005 | — | 94 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.34 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.73 | 0.87 | 11 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,569 | 2,569 | 0.12 | 0.09 | 0.24 | 2,600 |
| Vendor | 0.01 | 0.29 | 0.14 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 250 | 250 | 0.01 | 0.04 | 0.02 | 260 |
| Hauling | 0.24 | 20 | 7.8 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,332 | 16,332 | 0.90 | 2.6 | 0.95 | 17,133 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.11 | 1.4 | 0.00 | 0.00 | 0.30 | 0.30 | 0.00 | 0.07 | 0.07 | — | 306 | 306 | 0.01 | 0.01 | 0.47 | 310 |
| Vendor | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 29 | 29 | < 0.005 | < 0.005 | 0.03 | 31 |
| Hauling | 0.03 | 2.4 | 0.91 | 0.01 | 0.02 | 0.52 | 0.54 | 0.02 | 0.14 | 0.17 | — | 1,917 | 1,917 | 0.11 | 0.31 | 1.8 | 2,013 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.25 | 0.00 | 0.00 | 0.06 | 0.06 | 0.00 | 0.01 | 0.01 | — | 51 | 51 | < 0.005 | < 0.005 | 0.08 | 51 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |
| Hauling | 0.01 | 0.44 | 0.17 | < 0.005 | < 0.005 | 0.09 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 317 | 317 | 0.02 | 0.05 | 0.31 | 333 |

## 3.7. Grading (2027) - Unmitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 21 | 24 | 0.05 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 4,798 | 4,798 | 0.19 | 0.04 | — | 4,815 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.15 | 0.15 | — | 16 | 16 | < 0.005 | < 0.005 | 0.03 | 17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 21 | 24 | 0.05 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 4,798 | 4,798 | 0.19 | 0.04 | — | 4,815 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.15 | 0.15 | — | 16 | 16 | < 0.005 | < 0.005 | < 0.005 | 17 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.54 | 4.8 | 5.6 | 0.01 | 0.18 | — | 0.18 | 0.17 | — | 0.17 | — | 1,127 | 1,127 | 0.05 | 0.01 | — | 1,131 |
| Dust From Material Movement | — | — | — | — | — | 0.10 | 0.10 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | 0.33 | 0.33 | < 0.005 | 0.03 | 0.03 | — | 3.8 | 3.8 | < 0.005 | < 0.005 | < 0.005 | 4.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.88 | 1.0 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 187 | 187 | 0.01 | < 0.005 | — | 187 |
| Dust From Material Movement | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 0.63 | 0.63 | < 0.005 | < 0.005 | < 0.005 | 0.67 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.71 | 0.69 | 12 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,658 | 2,658 | 0.11 | 0.09 | 8.3 | 2,697 |
| Vendor | 0.01 | 0.26 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.64 | 256 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.26 | 19 | 7.5 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,001 | 16,001 | 0.79 | 2.6 | 34 | 16,831 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.70 | 0.86 | 10 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,520 | 2,520 | 0.04 | 0.09 | 0.21 | 2,549 |
| Vendor | 0.01 | 0.27 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.02 | 255 |
| Hauling | 0.24 | 20 | 7.6 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,008 | 16,008 | 0.79 | 2.6 | 0.88 | 16,806 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.16 | 0.20 | 2.5 | 0.00 | 0.00 | 0.61 | 0.61 | 0.00 | 0.14 | 0.14 | — | 600 | 600 | 0.01 | 0.02 | 0.84 | 608 |
| Vendor | < 0.005 | 0.06 | 0.03 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 57 | 57 | < 0.005 | 0.01 | 0.06 | 60 |
| Hauling | 0.06 | 4.7 | 1.8 | 0.03 | 0.05 | 1.0 | 1.1 | 0.05 | 0.28 | 0.33 | — | 3,758 | 3,758 | 0.19 | 0.61 | 3.5 | 3,949 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.04 | 0.46 | 0.00 | 0.00 | 0.11 | 0.11 | 0.00 | 0.03 | 0.03 | — | 99 | 99 | < 0.005 | < 0.005 | 0.14 | 101 |
| Vendor | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 9.5 | 9.5 | < 0.005 | < 0.005 | 0.01 | 9.9 |
| Hauling | 0.01 | 0.86 | 0.32 | < 0.005 | 0.01 | 0.19 | 0.20 | 0.01 | 0.05 | 0.06 | — | 622 | 622 | 0.03 | 0.10 | 0.57 | 654 |

## 3.8. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 21 | 24 | 0.05 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 4,798 | 4,798 | 0.19 | 0.04 | — | 4,815 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.15 | 0.15 | — | 16 | 16 | < 0.005 | < 0.005 | 0.03 | 17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 21 | 24 | 0.05 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 4,798 | 4,798 | 0.19 | 0.04 | — | 4,815 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.5 | 1.5 | < 0.005 | 0.15 | 0.15 | — | 16 | 16 | < 0.005 | < 0.005 | < 0.005 | 17 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.54 | 4.8 | 5.6 | 0.01 | 0.18 | — | 0.18 | 0.17 | — | 0.17 | — | 1,127 | 1,127 | 0.05 | 0.01 | — | 1,131 |
| Dust From Material Movement | — | — | — | — | — | 0.10 | 0.10 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | 0.33 | 0.33 | < 0.005 | 0.03 | 0.03 | — | 3.8 | 3.8 | < 0.005 | < 0.005 | < 0.005 | 4.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.10 | 0.88 | 1.0 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 187 | 187 | 0.01 | < 0.005 | — | 187 |
| Dust From Material Movement | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 0.63 | 0.63 | < 0.005 | < 0.005 | < 0.005 | 0.67 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.71 | 0.69 | 12 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,658 | 2,658 | 0.11 | 0.09 | 8.3 | 2,697 |
| Vendor | 0.01 | 0.26 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.64 | 256 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.26 | 19 | 7.5 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,001 | 16,001 | 0.79 | 2.6 | 34 | 16,831 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.70 | 0.86 | 10 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,520 | 2,520 | 0.04 | 0.09 | 0.21 | 2,549 |
| Vendor | 0.01 | 0.27 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.02 | 255 |
| Hauling | 0.24 | 20 | 7.6 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,008 | 16,008 | 0.79 | 2.6 | 0.88 | 16,806 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.16 | 0.20 | 2.5 | 0.00 | 0.00 | 0.61 | 0.61 | 0.00 | 0.14 | 0.14 | — | 600 | 600 | 0.01 | 0.02 | 0.84 | 608 |
| Vendor | < 0.005 | 0.06 | 0.03 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 57 | 57 | < 0.005 | 0.01 | 0.06 | 60 |
| Hauling | 0.06 | 4.7 | 1.8 | 0.03 | 0.05 | 1.0 | 1.1 | 0.05 | 0.28 | 0.33 | — | 3,758 | 3,758 | 0.19 | 0.61 | 3.5 | 3,949 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.03 | 0.04 | 0.46 | 0.00 | 0.00 | 0.11 | 0.11 | 0.00 | 0.03 | 0.03 | — | 99 | 99 | < 0.005 | < 0.005 | 0.14 | 101 |
| Vendor | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 9.5 | 9.5 | < 0.005 | < 0.005 | 0.01 | 9.9 |
| Hauling | 0.01 | 0.86 | 0.32 | < 0.005 | 0.01 | 0.19 | 0.20 | 0.01 | 0.05 | 0.06 | — | 622 | 622 | 0.03 | 0.10 | 0.57 | 654 |

## 3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | 0.01 | 5.2 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | < 0.005 | 5.2 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.9 | 25 | 28 | 0.06 | 0.79 | — | 0.79 | 0.73 | — | 0.73 | — | 5,376 | 5,376 | 0.22 | 0.04 | — | 5,394 |
| Dust From Material Movement | — | — | — | — | — | 0.27 | 0.27 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | 0.23 | 0.23 | < 0.005 | 0.02 | 0.02 | — | 3.2 | 3.2 | < 0.005 | < 0.005 | < 0.005 | 3.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.52 | 4.5 | 5.0 | 0.01 | 0.15 | — | 0.15 | 0.13 | — | 0.13 | — | 890 | 890 | 0.04 | 0.01 | — | 893 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | < 0.005 | < 0.005 | — | 0.53 | 0.53 | < 0.005 | < 0.005 | < 0.005 | 0.56 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 24 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,316 | 5,316 | 0.22 | 0.19 | 17 | 5,394 |
| Vendor | 0.22 | 7.9 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,338 | 7,338 | 0.31 | 1.0 | 19 | 7,667 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.3 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,334 | 5,334 | 0.26 | 0.87 | 11 | 5,610 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.7 | 20 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,040 | 5,040 | 0.07 | 0.19 | 0.43 | 5,098 |
| Vendor | 0.21 | 8.2 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,342 | 7,342 | 0.31 | 1.0 | 0.50 | 7,652 |
| Hauling | 0.08 | 6.6 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,336 | 5,336 | 0.26 | 0.87 | 0.29 | 5,602 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.91 | 1.1 | 14 | 0.00 | 0.00 | 3.4 | 3.4 | 0.00 | 0.79 | 0.79 | — | 3,343 | 3,343 | 0.05 | 0.12 | 4.7 | 3,385 |
| Vendor | 0.14 | 5.4 | 2.5 | 0.04 | 0.04 | 1.3 | 1.4 | 0.04 | 0.37 | 0.40 | — | 4,797 | 4,797 | 0.20 | 0.66 | 5.4 | 5,005 |
| Hauling | 0.05 | 4.4 | 1.6 | 0.02 | 0.05 | 0.96 | 1.0 | 0.05 | 0.26 | 0.31 | — | 3,487 | 3,487 | 0.17 | 0.57 | 3.2 | 3,663 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.17 | 0.21 | 2.6 | 0.00 | 0.00 | 0.62 | 0.62 | 0.00 | 0.14 | 0.14 | — | 553 | 553 | 0.01 | 0.02 | 0.77 | 560 |
| Vendor | 0.03 | 0.99 | 0.45 | 0.01 | 0.01 | 0.24 | 0.25 | 0.01 | 0.07 | 0.07 | — | 794 | 794 | 0.03 | 0.11 | 0.89 | 829 |
| Hauling | 0.01 | 0.79 | 0.30 | < 0.005 | 0.01 | 0.18 | 0.18 | 0.01 | 0.05 | 0.06 | — | 577 | 577 | 0.03 | 0.09 | 0.53 | 607 |

## 3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | 0.01 | 5.2 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | < 0.005 | 5.2 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.9 | 25 | 28 | 0.06 | 0.79 | — | 0.79 | 0.73 | — | 0.73 | — | 5,376 | 5,376 | 0.22 | 0.04 | — | 5,394 |
| Dust From Material Movement | — | — | — | — | — | 0.27 | 0.27 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | 0.23 | 0.23 | < 0.005 | 0.02 | 0.02 | — | 3.2 | 3.2 | < 0.005 | < 0.005 | < 0.005 | 3.4 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.52 | 4.5 | 5.0 | 0.01 | 0.15 | — | 0.15 | 0.13 | — | 0.13 | — | 890 | 890 | 0.04 | 0.01 | — | 893 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | < 0.005 | < 0.005 | — | 0.53 | 0.53 | < 0.005 | < 0.005 | < 0.005 | 0.56 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 24 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,316 | 5,316 | 0.22 | 0.19 | 17 | 5,394 |
| Vendor | 0.22 | 7.9 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,338 | 7,338 | 0.31 | 1.0 | 19 | 7,667 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.3 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,334 | 5,334 | 0.26 | 0.87 | 11 | 5,610 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.7 | 20 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,040 | 5,040 | 0.07 | 0.19 | 0.43 | 5,098 |
| Vendor | 0.21 | 8.2 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,342 | 7,342 | 0.31 | 1.0 | 0.50 | 7,652 |
| Hauling | 0.08 | 6.6 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,336 | 5,336 | 0.26 | 0.87 | 0.29 | 5,602 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.91 | 1.1 | 14 | 0.00 | 0.00 | 3.4 | 3.4 | 0.00 | 0.79 | 0.79 | — | 3,343 | 3,343 | 0.05 | 0.12 | 4.7 | 3,385 |
| Vendor | 0.14 | 5.4 | 2.5 | 0.04 | 0.04 | 1.3 | 1.4 | 0.04 | 0.37 | 0.40 | — | 4,797 | 4,797 | 0.20 | 0.66 | 5.4 | 5,005 |
| Hauling | 0.05 | 4.4 | 1.6 | 0.02 | 0.05 | 0.96 | 1.0 | 0.05 | 0.26 | 0.31 | — | 3,487 | 3,487 | 0.17 | 0.57 | 3.2 | 3,663 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.17 | 0.21 | 2.6 | 0.00 | 0.00 | 0.62 | 0.62 | 0.00 | 0.14 | 0.14 | — | 553 | 553 | 0.01 | 0.02 | 0.77 | 560 |
| Vendor | 0.03 | 0.99 | 0.45 | 0.01 | 0.01 | 0.24 | 0.25 | 0.01 | 0.07 | 0.07 | — | 794 | 794 | 0.03 | 0.11 | 0.89 | 829 |
| Hauling | 0.01 | 0.79 | 0.30 | < 0.005 | 0.01 | 0.18 | 0.18 | 0.01 | 0.05 | 0.06 | — | 577 | 577 | 0.03 | 0.09 | 0.53 | 607 |

## 3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.3 | 11 | 13 | 0.03 | 0.33 | — | 0.33 | 0.31 | — | 0.31 | — | 2,479 | 2,479 | 0.10 | 0.02 | — | 2,488 |
| Dust From Material Movement | — | — | — | — | — | 0.12 | 0.12 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.01 | 0.01 | — | 1.5 | 1.5 | < 0.005 | < 0.005 | < 0.005 | 1.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 2.0 | 2.3 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 410 | 410 | 0.02 | < 0.005 | — | 412 |
| Dust From Material Movement | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.24 | 0.24 | < 0.005 | < 0.005 | < 0.005 | 0.25 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 23 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,221 | 5,221 | 0.05 | 0.19 | 15 | 5,293 |
| Vendor | 0.17 | 7.5 | 3.6 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,167 | 7,167 | 0.26 | 1.0 | 18 | 7,492 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.1 | 2.4 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,214 | 5,214 | 0.26 | 0.83 | 11 | 5,479 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.6 | 19 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 4,950 | 4,950 | 0.06 | 0.19 | 0.38 | 5,008 |
| Vendor | 0.16 | 7.9 | 3.7 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,171 | 7,171 | 0.26 | 1.0 | 0.47 | 7,480 |
| Hauling | 0.08 | 6.4 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,216 | 5,216 | 0.26 | 0.83 | 0.27 | 5,471 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.41 | 0.47 | 6.0 | 0.00 | 0.00 | 1.6 | 1.6 | 0.00 | 0.36 | 0.36 | — | 1,514 | 1,514 | 0.02 | 0.06 | 1.9 | 1,533 |
| Vendor | 0.05 | 2.4 | 1.1 | 0.02 | 0.02 | 0.61 | 0.63 | 0.02 | 0.17 | 0.19 | — | 2,160 | 2,160 | 0.08 | 0.31 | 2.3 | 2,256 |
| Hauling | 0.02 | 1.9 | 0.74 | 0.01 | 0.02 | 0.44 | 0.46 | 0.02 | 0.12 | 0.14 | — | 1,572 | 1,572 | 0.08 | 0.25 | 1.4 | 1,650 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.08 | 1.1 | 0.00 | 0.00 | 0.28 | 0.28 | 0.00 | 0.07 | 0.07 | — | 251 | 251 | < 0.005 | 0.01 | 0.32 | 254 |
| Vendor | 0.01 | 0.43 | 0.20 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | — | 358 | 358 | 0.01 | 0.05 | 0.39 | 373 |
| Hauling | < 0.005 | 0.35 | 0.13 | < 0.005 | < 0.005 | 0.08 | 0.08 | < 0.005 | 0.02 | 0.03 | — | 260 | 260 | 0.01 | 0.04 | 0.23 | 273 |

## 3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.3 | 11 | 13 | 0.03 | 0.33 | — | 0.33 | 0.31 | — | 0.31 | — | 2,479 | 2,479 | 0.10 | 0.02 | — | 2,488 |
| Dust From Material Movement | — | — | — | — | — | 0.12 | 0.12 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.01 | 0.01 | — | 1.5 | 1.5 | < 0.005 | < 0.005 | < 0.005 | 1.5 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.23 | 2.0 | 2.3 | < 0.005 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 410 | 410 | 0.02 | < 0.005 | — | 412 |
| Dust From Material Movement | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.24 | 0.24 | < 0.005 | < 0.005 | < 0.005 | 0.25 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 23 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,221 | 5,221 | 0.05 | 0.19 | 15 | 5,293 |
| Vendor | 0.17 | 7.5 | 3.6 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,167 | 7,167 | 0.26 | 1.0 | 18 | 7,492 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.1 | 2.4 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,214 | 5,214 | 0.26 | 0.83 | 11 | 5,479 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.6 | 19 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 4,950 | 4,950 | 0.06 | 0.19 | 0.38 | 5,008 |
| Vendor | 0.16 | 7.9 | 3.7 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,171 | 7,171 | 0.26 | 1.0 | 0.47 | 7,480 |
| Hauling | 0.08 | 6.4 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,216 | 5,216 | 0.26 | 0.83 | 0.27 | 5,471 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.41 | 0.47 | 6.0 | 0.00 | 0.00 | 1.6 | 1.6 | 0.00 | 0.36 | 0.36 | — | 1,514 | 1,514 | 0.02 | 0.06 | 1.9 | 1,533 |
| Vendor | 0.05 | 2.4 | 1.1 | 0.02 | 0.02 | 0.61 | 0.63 | 0.02 | 0.17 | 0.19 | — | 2,160 | 2,160 | 0.08 | 0.31 | 2.3 | 2,256 |
| Hauling | 0.02 | 1.9 | 0.74 | 0.01 | 0.02 | 0.44 | 0.46 | 0.02 | 0.12 | 0.14 | — | 1,572 | 1,572 | 0.08 | 0.25 | 1.4 | 1,650 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.08 | 1.1 | 0.00 | 0.00 | 0.28 | 0.28 | 0.00 | 0.07 | 0.07 | — | 251 | 251 | < 0.005 | 0.01 | 0.32 | 254 |
| Vendor | 0.01 | 0.43 | 0.20 | < 0.005 | < 0.005 | 0.11 | 0.11 | < 0.005 | 0.03 | 0.03 | — | 358 | 358 | 0.01 | 0.05 | 0.39 | 373 |
| Hauling | < 0.005 | 0.35 | 0.13 | < 0.005 | < 0.005 | 0.08 | 0.08 | < 0.005 | 0.02 | 0.03 | — | 260 | 260 | 0.01 | 0.04 | 0.23 | 273 |

## 3.13. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36 | 3.0 | 4.0 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 978 | 978 | 0.04 | 0.01 | — | 982 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Paving | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 0.86 | 0.86 | < 0.005 | < 0.005 | < 0.005 | 0.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.55 | 0.73 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 162 | 162 | 0.01 | < 0.005 | — | 163 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Paving | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.14 | 0.14 | < 0.005 | < 0.005 | < 0.005 | 0.15 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,194 | 1,194 | 0.04 | 0.17 | 3.0 | 1,249 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,195 | 1,195 | 0.04 | 0.17 | 0.08 | 1,247 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.11 | 1.4 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 358 | 358 | < 0.005 | 0.01 | 0.46 | 362 |
| Vendor | < 0.005 | 0.23 | 0.11 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.02 | 0.02 | — | 213 | 213 | 0.01 | 0.03 | 0.23 | 222 |
| Hauling | < 0.005 | 0.11 | 0.04 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 93 | 93 | < 0.005 | 0.01 | 0.08 | 97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.26 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 59 | 59 | < 0.005 | < 0.005 | 0.08 | 60 |
| Vendor | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 35 | 35 | < 0.005 | < 0.005 | 0.04 | 37 |
| Hauling | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.01 | 16 |

## 3.14. Paving (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36 | 3.0 | 4.0 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 978 | 978 | 0.04 | 0.01 | — | 982 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Paving | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 0.86 | 0.86 | < 0.005 | < 0.005 | < 0.005 | 0.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.55 | 0.73 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 162 | 162 | 0.01 | < 0.005 | — | 163 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Paving | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.14 | 0.14 | < 0.005 | < 0.005 | < 0.005 | 0.15 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,194 | 1,194 | 0.04 | 0.17 | 3.0 | 1,249 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,195 | 1,195 | 0.04 | 0.17 | 0.08 | 1,247 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.11 | 1.4 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 358 | 358 | < 0.005 | 0.01 | 0.46 | 362 |
| Vendor | < 0.005 | 0.23 | 0.11 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.02 | 0.02 | — | 213 | 213 | 0.01 | 0.03 | 0.23 | 222 |
| Hauling | < 0.005 | 0.11 | 0.04 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 93 | 93 | < 0.005 | 0.01 | 0.08 | 97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.26 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 59 | 59 | < 0.005 | < 0.005 | 0.08 | 60 |
| Vendor | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 35 | 35 | < 0.005 | < 0.005 | 0.04 | 37 |
| Hauling | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.01 | 16 |

## 3.15. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26 | 2.8 | 4.0 | 0.01 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 648 | 648 | 0.03 | 0.01 | — | 650 |
| Architectural Coatings | 21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.51 | 0.74 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 107 | 107 | < 0.005 | < 0.005 | — | 108 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 3.9 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.06 | 2.5 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,389 | 2,389 | 0.09 | 0.34 | 6.0 | 2,497 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.05 | 2.6 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,390 | 2,390 | 0.09 | 0.34 | 0.16 | 2,493 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.22 | 2.9 | 0.00 | 0.00 | 0.74 | 0.74 | 0.00 | 0.17 | 0.17 | — | 716 | 716 | 0.01 | 0.03 | 0.92 | 725 |
| Vendor | 0.02 | 0.94 | 0.43 | 0.01 | 0.01 | 0.24 | 0.25 | 0.01 | 0.07 | 0.07 | — | 851 | 851 | 0.03 | 0.12 | 0.93 | 889 |
| Hauling | < 0.005 | 0.23 | 0.09 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 186 | 186 | 0.01 | 0.03 | 0.16 | 195 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.52 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 118 | 118 | < 0.005 | < 0.005 | 0.15 | 120 |
| Vendor | < 0.005 | 0.17 | 0.08 | < 0.005 | < 0.005 | 0.04 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 141 | 141 | 0.01 | 0.02 | 0.15 | 147 |
| Hauling | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 31 | 31 | < 0.005 | < 0.005 | 0.03 | 32 |

## 3.16. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 59 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26 | 2.8 | 4.0 | 0.01 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 648 | 648 | 0.03 | 0.01 | — | 650 |
| Architectural Coatings | 21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.51 | 0.74 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 107 | 107 | < 0.005 | < 0.005 | — | 108 |
| Architectural Coatings | 3.9 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.06 | 2.5 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,389 | 2,389 | 0.09 | 0.34 | 6.0 | 2,497 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.05 | 2.6 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,390 | 2,390 | 0.09 | 0.34 | 0.16 | 2,493 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.22 | 2.9 | 0.00 | 0.00 | 0.74 | 0.74 | 0.00 | 0.17 | 0.17 | — | 716 | 716 | 0.01 | 0.03 | 0.92 | 725 |
| Vendor | 0.02 | 0.94 | 0.43 | 0.01 | 0.01 | 0.24 | 0.25 | 0.01 | 0.07 | 0.07 | — | 851 | 851 | 0.03 | 0.12 | 0.93 | 889 |
| Hauling | < 0.005 | 0.23 | 0.09 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 186 | 186 | 0.01 | 0.03 | 0.16 | 195 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.52 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 118 | 118 | < 0.005 | < 0.005 | 0.15 | 120 |
| Vendor | < 0.005 | 0.17 | 0.08 | < 0.005 | < 0.005 | 0.04 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 141 | 141 | 0.01 | 0.02 | 0.15 | 147 |
| Hauling | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 31 | 31 | < 0.005 | < 0.005 | 0.03 | 32 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,342 | 4,342 | 0.55 | 0.07 | — | 4,375 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 850 | 850 | 0.11 | 0.01 | — | 856 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 742 | 742 | 0.09 | 0.01 | — | 748 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 662 | 662 | 0.08 | 0.01 | — | 667 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 886 | 886 | 0.11 | 0.01 | — | 893 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 2,200 | 2,200 | 0.28 | 0.03 | — | 2,217 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 367 | 367 | 0.05 | 0.01 | — | 370 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 171 | 171 | 0.02 | < 0.005 | — | 173 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10,219 | 10,219 | 1.3 | 0.16 | — | 10,299 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,342 | 4,342 | 0.55 | 0.07 | — | 4,375 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 850 | 850 | 0.11 | 0.01 | — | 856 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 742 | 742 | 0.09 | 0.01 | — | 748 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 662 | 662 | 0.08 | 0.01 | — | 667 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 886 | 886 | 0.11 | 0.01 | — | 893 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 2,200 | 2,200 | 0.28 | 0.03 | — | 2,217 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 367 | 367 | 0.05 | 0.01 | — | 370 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 171 | 171 | 0.02 | < 0.005 | — | 173 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10,219 | 10,219 | 1.3 | 0.16 | — | 10,299 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 719 | 719 | 0.09 | 0.01 | — | 724 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 141 | 141 | 0.02 | < 0.005 | — | 142 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 123 | 123 | 0.02 | < 0.005 | — | 124 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 110 | 110 | 0.01 | < 0.005 | — | 110 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 147 | 147 | 0.02 | < 0.005 | — | 148 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 364 | 364 | 0.05 | 0.01 | — | 367 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 61 | 61 | 0.01 | < 0.005 | — | 61 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 28 | 28 | < 0.005 | < 0.005 | — | 29 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,692 | 1,692 | 0.21 | 0.03 | — | 1,705 |

## 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,339 | 4,339 | 0.55 | 0.07 | — | 4,373 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 847 | 847 | 0.11 | 0.01 | — | 854 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 636 | 636 | 0.08 | 0.01 | — | 641 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 662 | 662 | 0.08 | 0.01 | — | 667 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 886 | 886 | 0.11 | 0.01 | — | 893 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 2,089 | 2,089 | 0.26 | 0.03 | — | 2,105 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 347 | 347 | 0.04 | 0.01 | — | 349 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 171 | 171 | 0.02 | < 0.005 | — | 172 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | 9,977 | 9,977 | 1.3 | 0.15 | — | 10,054 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,339 | 4,339 | 0.55 | 0.07 | — | 4,373 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 847 | 847 | 0.11 | 0.01 | — | 854 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 636 | 636 | 0.08 | 0.01 | — | 641 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 662 | 662 | 0.08 | 0.01 | — | 667 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 886 | 886 | 0.11 | 0.01 | — | 893 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 2,089 | 2,089 | 0.26 | 0.03 | — | 2,105 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 347 | 347 | 0.04 | 0.01 | — | 349 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 171 | 171 | 0.02 | < 0.005 | — | 172 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 9,977 | 9,977 | 1.3 | 0.15 | — | 10,054 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 718 | 718 | 0.09 | 0.01 | — | 724 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 140 | 140 | 0.02 | < 0.005 | — | 141 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 105 | 105 | 0.01 | < 0.005 | — | 106 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 110 | 110 | 0.01 | < 0.005 | — | 110 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 147 | 147 | 0.02 | < 0.005 | — | 148 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | 346 | 346 | 0.04 | 0.01 | — | 349 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 | 0.01 | < 0.005 | — | 58 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,652 | 1,652 | 0.21 | 0.03 | — | 1,665 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.05 | 0.93 | 0.78 | 0.01 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | — | 1,107 | 1,107 | 0.10 | < 0.005 | — | 1,110 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | 0.09 | 1.7 | 1.4 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,036 | 2,036 | 0.18 | < 0.005 | — | 2,041 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 498 | 498 | 0.04 | < 0.005 | — | 500 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.29 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 343 | 343 | 0.03 | < 0.005 | — | 344 |
| Total | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 8,455 | 8,455 | 0.75 | 0.02 | — | 8,478 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.05 | 0.93 | 0.78 | 0.01 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | — | 1,107 | 1,107 | 0.10 | < 0.005 | — | 1,110 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | 0.09 | 1.7 | 1.4 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,036 | 2,036 | 0.18 | < 0.005 | — | 2,041 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 498 | 498 | 0.04 | < 0.005 | — | 500 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.29 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 343 | 343 | 0.03 | < 0.005 | — | 344 |
| Total | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 8,455 | 8,455 | 0.75 | 0.02 | — | 8,478 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.42 | 0.36 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 459 | 459 | 0.04 | < 0.005 | — | 460 |
| Arena | 0.01 | 0.26 | 0.22 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 282 | 282 | 0.02 | < 0.005 | — | 282 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | 0.01 | 0.17 | 0.14 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 183 | 183 | 0.02 | < 0.005 | — | 184 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | 0.02 | 0.31 | 0.26 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 337 | 337 | 0.03 | < 0.005 | — | 338 |
| Apartments Mid Rise | < 0.005 | 0.07 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 83 | 83 | 0.01 | < 0.005 | — | 83 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | < 0.005 | 0.05 | 0.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 57 | 57 | 0.01 | < 0.005 | — | 57 |
| Total | 0.07 | 1.3 | 1.1 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,400 | 1,400 | 0.12 | < 0.005 | — | 1,404 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.05 | 0.93 | 0.78 | 0.01 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | — | 1,107 | 1,107 | 0.10 | < 0.005 | — | 1,110 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | 0.09 | 1.7 | 1.4 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,036 | 2,036 | 0.18 | < 0.005 | — | 2,041 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 495 | 495 | 0.04 | < 0.005 | — | 496 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.29 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 343 | 343 | 0.03 | < 0.005 | — | 344 |
| Total | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 8,451 | 8,451 | 0.75 | 0.02 | — | 8,475 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.05 | 0.93 | 0.78 | 0.01 | 0.07 | — | 0.07 | 0.07 | — | 0.07 | — | 1,107 | 1,107 | 0.10 | < 0.005 | — | 1,110 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | 0.09 | 1.7 | 1.4 | 0.01 | 0.13 | — | 0.13 | 0.13 | — | 0.13 | — | 2,036 | 2,036 | 0.18 | < 0.005 | — | 2,041 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 495 | 495 | 0.04 | < 0.005 | — | 496 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.29 | 0.24 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 343 | 343 | 0.03 | < 0.005 | — | 344 |
| Total | 0.39 | 7.1 | 5.8 | 0.04 | 0.54 | — | 0.54 | 0.54 | — | 0.54 | — | 8,451 | 8,451 | 0.75 | 0.02 | — | 8,475 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.42 | 0.36 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 459 | 459 | 0.04 | < 0.005 | — | 460 |
| Arena | 0.01 | 0.26 | 0.22 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 282 | 282 | 0.02 | < 0.005 | — | 282 |
| High Turnover (Sit Down Restaurant) | 0.01 | 0.17 | 0.14 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 183 | 183 | 0.02 | < 0.005 | — | 184 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | 0.02 | 0.31 | 0.26 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 337 | 337 | 0.03 | < 0.005 | — | 338 |
| Apartments Mid Rise | < 0.005 | 0.07 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 82 | 82 | 0.01 | < 0.005 | — | 82 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | < 0.005 | 0.05 | 0.04 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 57 | 57 | 0.01 | < 0.005 | — | 57 |
| Total | 0.07 | 1.3 | 1.1 | 0.01 | 0.10 | — | 0.10 | 0.10 | — | 0.10 | — | 1,399 | 1,399 | 0.12 | < 0.005 | — | 1,403 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 1.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 11 | 0.60 | 70 | < 0.005 | 0.11 | — | 0.11 | 0.09 | — | 0.09 | — | 277 | 277 | 0.01 | < 0.005 | — | 278 |
| Total | 31 | 0.60 | 70 | < 0.005 | 0.11 | — | 0.11 | 0.09 | — | 0.09 | — | 277 | 277 | 0.01 | < 0.005 | — | 278 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 20 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.4 | 0.07 | 8.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31 | 31 | < 0.005 | < 0.005 | — | 32 |
| Total | 5.0 | 0.07 | 8.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31 | 31 | < 0.005 | < 0.005 | — | 32 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 11 | 0.60 | 70 | < 0.005 | 0.11 | — | 0.11 | 0.09 | — | 0.09 | — | 277 | 277 | 0.01 | < 0.005 | — | 278 |
| Total | 31 | 0.60 | 70 | < 0.005 | 0.11 | — | 0.11 | 0.09 | — | 0.09 | — | 277 | 277 | 0.01 | < 0.005 | — | 278 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.1 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 20 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.4 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.4 | 0.07 | 8.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31 | 31 | < 0.005 | < 0.005 | — | 32 |
| Total | 5.0 | 0.07 | 8.8 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 31 | 31 | < 0.005 | < 0.005 | — | 32 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 51 | 138 | 189 | 5.2 | 0.13 | — | 358 |
| Arena | — | — | — | — | — | — | — | — | — | — | 11 | 31 | 42 | 1.1 | 0.03 | — | 78 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 69 | 176 | 246 | 7.1 | 0.17 | — | 475 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 18 | 45 | 63 | 1.8 | 0.04 | — | 122 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |
| Total | — | — | — | — | — | — | — | — | — | — | 155 | 407 | 562 | 16 | 0.38 | — | 1,074 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 51 | 138 | 189 | 5.2 | 0.13 | — | 358 |
| Arena | — | — | — | — | — | — | — | — | — | — | 11 | 31 | 42 | 1.1 | 0.03 | — | 78 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 69 | 176 | 246 | 7.1 | 0.17 | — | 475 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 18 | 45 | 63 | 1.8 | 0.04 | — | 122 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | 155 | 407 | 562 | 16 | 0.38 | — | 1,074 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 8.4 | 23 | 31 | 0.87 | 0.02 | — | 59 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 5.2 | 7.0 | 0.18 | < 0.005 | — | 13 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 11 | 29 | 41 | 1.2 | 0.03 | — | 79 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 2.9 | 7.5 | 10 | 0.30 | 0.01 | — | 20 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 1.0 | 2.6 | 3.6 | 0.10 | < 0.005 | — | 6.9 |
| Total | — | — | — | — | — | — | — | — | — | — | 26 | 67 | 93 | 2.6 | 0.06 | — | 178 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 47 | 127 | 174 | 4.8 | 0.12 | — | 328 |
| Arena | — | — | — | — | — | — | — | — | — | — | 9.9 | 29 | 39 | 1.0 | 0.02 | — | 71 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 61 | 156 | 217 | 6.3 | 0.15 | — | 419 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 15 | 39 | 54 | 1.5 | 0.04 | — | 103 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |
| Total | — | — | — | — | — | — | — | — | — | — | 139 | 366 | 505 | 14 | 0.34 | — | 964 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 47 | 127 | 174 | 4.8 | 0.12 | — | 328 |
| Arena | — | — | — | — | — | — | — | — | — | — | 9.9 | 29 | 39 | 1.0 | 0.02 | — | 71 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 61 | 156 | 217 | 6.3 | 0.15 | — | 419 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 15 | 39 | 54 | 1.5 | 0.04 | — | 103 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |
| Total | — | — | — | — | — | — | — | — | — | — | 139 | 366 | 505 | 14 | 0.34 | — | 964 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 7.7 | 21 | 29 | 0.79 | 0.02 | — | 54 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.6 | 4.8 | 6.4 | 0.17 | < 0.005 | — | 12 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 10 | 26 | 36 | 1.0 | 0.03 | — | 69 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 2.5 | 6.4 | 8.9 | 0.26 | 0.01 | — | 17 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 1.0 | 2.6 | 3.6 | 0.10 | < 0.005 | — | 6.9 |
| Total | — | — | — | — | — | — | — | — | — | — | 23 | 61 | 84 | 2.4 | 0.06 | — | 160 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 192 | 0.00 | 192 | 19 | 0.00 | — | 673 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 124 | 0.00 | 124 | 12 | 0.00 | — | 434 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 12 | 0.00 | 12 | 1.2 | 0.00 | — | 43 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |

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| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 192 | 0.00 | 192 | 19 | 0.00 | — | 673 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 124 | 0.00 | 124 | 12 | 0.00 | — | 434 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 12 | 0.00 | 12 | 1.2 | 0.00 | — | 43 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 173 | 0.00 | 173 | 17 | 0.00 | — | 607 |
| Arena | — | — | — | — | — | — | — | — | — | — | 0.30 | 0.00 | 0.30 | 0.03 | 0.00 | — | 1.1 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 32 | 0.00 | 32 | 3.2 | 0.00 | — | 111 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 21 | 0.00 | 21 | 2.1 | 0.00 | — | 72 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 6.7 | 0.00 | 6.7 | 0.67 | 0.00 | — | 23 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 2.1 | 0.00 | 2.1 | 0.21 | 0.00 | — | 7.2 |
| Total | — | — | — | — | — | — | — | — | — | — | 235 | 0.00 | 235 | 23 | 0.00 | — | 822 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
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| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 192 | 0.00 | 192 | 19 | 0.00 | — | 673 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 124 | 0.00 | 124 | 12 | 0.00 | — | 434 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 12 | 0.00 | 12 | 1.2 | 0.00 | — | 43 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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| Government | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 192 | 0.00 | 192 | 19 | 0.00 | — | 673 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 124 | 0.00 | 124 | 12 | 0.00 | — | 434 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 12 | 0.00 | 12 | 1.2 | 0.00 | — | 43 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,419 | 0.00 | 1,419 | 142 | 0.00 | — | 4,963 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 173 | 0.00 | 173 | 17 | 0.00 | — | 607 |
| Arena | — | — | — | — | — | — | — | — | — | — | 0.30 | 0.00 | 0.30 | 0.03 | 0.00 | — | 1.1 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 32 | 0.00 | 32 | 3.2 | 0.00 | — | 111 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Hotel | — | — | — | — | — | — | — | — | — | — | 21 | 0.00 | 21 | 2.1 | 0.00 | — | 72 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 6.7 | 0.00 | 6.7 | 0.67 | 0.00 | — | 23 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 2.1 | 0.00 | 2.1 | 0.21 | 0.00 | — | 7.2 |
| Total | — | — | — | — | — | — | — | — | — | — | 235 | 0.00 | 235 | 23 | 0.00 | — | 822 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 47 | 47 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 344 | 344 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 47 | 47 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 344 | 344 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.14 | 0.14 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.13 | 0.13 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.8 | 7.8 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.16 | 0.16 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 65 | 65 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 47 | 47 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 344 | 344 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 47 | 47 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 344 | 344 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 393 | 393 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.14 | 0.14 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.13 | 0.13 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 7.8 | 7.8 |
| Hotel | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.16 | 0.16 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 65 | 65 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 6/1/2026 | 8/28/2026 | 5.0 | 65 | Reno/Road Demo |
| Site Preparation | Site Preparation | 8/3/2026 | 10/30/2026 | 5.0 | 65 | Site Prep & Utilities |
| Grading | Grading | 11/2/2026 | 4/30/2027 | 5.0 | 130 | Grading & Excavation |
| Building Construction | Building Construction | 2/1/2027 | 6/2/2028 | 5.0 | 350 | Buildings Construction |
| Paving | Paving | 3/6/2028 | 6/2/2028 | 5.0 | 65 | Hardscape/Road/Sidewalks |
| Architectural Coating | Architectural Coating | 1/3/2028 | 6/30/2028 | 5.0 | 130 | Painting/Signage/Landscaping |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Demolition | Concrete/Industrial Saws | Diesel | Average | 2.0 | 6.0 | 33 | 0.73 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Demolition | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |
| Demolition | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Demolition | Generator Sets | Diesel | Average | 2.0 | 8.0 | 15 | 0.74 |
| Demolition | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 250 | 0.43 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 2.0 | 8.0 | 84 | 0.37 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Preparation | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Site Preparation | Excavators | Diesel | Average | 2.0 | 8.0 | 36 | 0.38 |
| Site Preparation | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Site Preparation | Generator Sets | Diesel | Average | 2.0 | 7.5 | 15 | 0.74 |
| Site Preparation | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 250 | 0.43 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Grading | Graders | Diesel | Average | 1.00 | 8.0 | 148 | 0.41 |
| Grading | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Grading | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 250 | 0.43 |
| Grading | Generator Sets | Diesel | Average | 2.0 | 8.0 | 15 | 0.74 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Grading | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Building Construction | Generator Sets | Diesel | Average | 5.0 | 7.0 | 15 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 2.0 | 7.0 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 10.0 | 6.0 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.0 | 7.0 | 84 | 0.37 |
| Building Construction | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Building Construction | Excavators | Diesel | Average | 2.0 | 6.0 | 36 | 0.38 |
| Building Construction | Crawler Tractors | Diesel | Average | 4.0 | 6.0 | 175 | 0.43 |
| Building Construction | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Building Construction | Air Compressors | Diesel | Average | 5.0 | 7.0 | 37 | 0.48 |
| Paving | Pavers | Diesel | Average | 1.00 | 7.0 | 81 | 0.42 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Paving | Excavators | Diesel | Average | 1.00 | 6.0 | 36 | 0.38 |
| Paving | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Tractors/Loaders/Back | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Paving | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Paving | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Paving | Paving Equipment | Diesel | Average | 2.0 | 7.0 | 300 | 0.36 |
| Architectural Coating | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Average | 2.0 | 7.0 | 46 | 0.31 |
| Architectural Coating | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Architectural Coating | Rough Terrain Forklifts | Diesel | Average | 2.0 | 7.0 | 96 | 0.40 |
| Architectural Coating | Skid Steer Loaders | Diesel | Average | 2.0 | 7.0 | 71 | 0.37 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Demolition | Concrete/Industrial Saws | Diesel | Average | 2.0 | 6.0 | 33 | 0.73 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Demolition | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |
| Demolition | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Demolition | Generator Sets | Diesel | Average | 2.0 | 8.0 | 15 | 0.74 |
| Demolition | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 250 | 0.43 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 2.0 | 8.0 | 84 | 0.37 |
| Site Preparation | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Site Preparation | Excavators | Diesel | Average | 2.0 | 8.0 | 36 | 0.38 |
| Site Preparation | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Site Preparation | Generator Sets | Diesel | Average | 2.0 | 7.5 | 15 | 0.74 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Preparation | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 250 | 0.43 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Grading | Graders | Diesel | Average | 1.00 | 8.0 | 148 | 0.41 |
| Grading | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Grading | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 250 | 0.43 |
| Grading | Generator Sets | Diesel | Average | 2.0 | 8.0 | 15 | 0.74 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Grading | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Building Construction | Generator Sets | Diesel | Average | 5.0 | 7.0 | 15 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 2.0 | 7.0 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 10.0 | 6.0 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.0 | 7.0 | 84 | 0.37 |
| Building Construction | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Building Construction | Excavators | Diesel | Average | 2.0 | 6.0 | 36 | 0.38 |
| Building Construction | Crawler Tractors | Diesel | Average | 4.0 | 6.0 | 175 | 0.43 |
| Building Construction | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Building Construction | Air Compressors | Diesel | Average | 5.0 | 7.0 | 37 | 0.48 |
| Paving | Pavers | Diesel | Average | 1.00 | 7.0 | 81 | 0.42 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Paving | Excavators | Diesel | Average | 1.00 | 6.0 | 36 | 0.38 |
| Paving | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Paving | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Paving | Paving Equipment | Diesel | Average | 2.0 | 7.0 | 300 | 0.36 |
| Architectural Coating | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Average | 2.0 | 7.0 | 46 | 0.31 |
| Architectural Coating | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Architectural Coating | Rough Terrain Forklifts | Diesel | Average | 2.0 | 7.0 | 96 | 0.40 |
| Architectural Coating | Skid Steer Loaders | Diesel | Average | 2.0 | 7.0 | 71 | 0.37 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Demolition | Vendor | 4.0 | 10 | HHDT,MHDT |
| Demolition | Hauling | 120 | 20 | HHDT |
| Demolition | Onsite truck | 2.0 | 1.00 | HHDT |
| Site Preparation | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | 16 | 10 | HHDT,MHDT |
| Site Preparation | Hauling | 160 | 20 | HHDT |
| Site Preparation | Onsite truck | 2.0 | 1.00 | HHDT |
| Grading | Worker | 200 | 19 | LDA,LDT1,LDT2 |
| Grading | Vendor | 8.0 | 10 | HHDT,MHDT |
| Grading | Hauling | 240 | 20 | HHDT |
| Grading | Onsite truck | 2.0 | 2.0 | HHDT |
| Building Construction | Worker | 400 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 240 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 80 | 20 | HHDT |
| Building Construction | Onsite truck | 1.00 | 1.00 | HHDT |

| | | | | |
|---|---|---|---|---|
| Paving | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Paving | Vendor | 40 | 10 | HHDT,MHDT |
| Paving | Hauling | 8.0 | 20 | HHDT |
| Paving | Onsite truck | 1.00 | 1.00 | HHDT |
| Architectural Coating | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | 80 | 10 | HHDT,MHDT |
| Architectural Coating | Hauling | 8.0 | 20 | HHDT |
| Architectural Coating | Onsite truck | 0.00 | 0.00 | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Demolition | Vendor | 4.0 | 10 | HHDT,MHDT |
| Demolition | Hauling | 120 | 20 | HHDT |
| Demolition | Onsite truck | 2.0 | 1.00 | HHDT |
| Site Preparation | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | 16 | 10 | HHDT,MHDT |
| Site Preparation | Hauling | 160 | 20 | HHDT |
| Site Preparation | Onsite truck | 2.0 | 1.00 | HHDT |
| Grading | Worker | 200 | 19 | LDA,LDT1,LDT2 |
| Grading | Vendor | 8.0 | 10 | HHDT,MHDT |
| Grading | Hauling | 240 | 20 | HHDT |
| Grading | Onsite truck | 2.0 | 2.0 | HHDT |
| Building Construction | Worker | 400 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 240 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 80 | 20 | HHDT |
| Building Construction | Onsite truck | 1.00 | 1.00 | HHDT |
| Paving | Worker | 160 | 19 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Paving | Vendor | 40 | 10 | HHDT,MHDT |
| Paving | Hauling | 8.0 | 20 | HHDT |
| Paving | Onsite truck | 1.00 | 1.00 | HHDT |
| Architectural Coating | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | 80 | 10 | HHDT,MHDT |
| Architectural Coating | Hauling | 8.0 | 20 | HHDT |
| Architectural Coating | Onsite truck | 0.00 | 0.00 | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 272,160 | 90,720 | 1,110,000 | 370,000 | 6,534 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Cubic Yards) | Material Exported (Cubic Yards) | Acres Graded (acres) | Material Demolished (Ton of Debris) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 130 | 2,000 | 0.00 |
| Site Preparation | 0.00 | 0.00 | 65 | 0.00 | 0.00 |
| Grading | 0.00 | 0.00 | 195 | 0.00 | 0.00 |

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | 0.00 | 0.00 | 525 | 0.00 | 0.00 |
| Paving | 0.00 | 0.00 | 65 | 0.00 | 2.5 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 3 | 74% | 74% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Government (Civic Center) | 0.00 | 0% |
| Paving | Government (Civic Center) | 0.00 | 0% |
| Paving | Arena | 0.00 | 0% |
| Paving | High Turnover (Sit Down Restaurant) | 0.00 | 0% |
| Paving | Enclosed Parking with Elevator | 0.00 | 0% |
| Paving | Unenclosed Parking with Elevator | 0.00 | 50% |
| Paving | Hotel | 0.00 | 0% |
| Paving | Unenclosed Parking with Elevator | 0.00 | 50% |
| Paving | Apartments Mid Rise | — | 0% |
| Paving | Government (Civic Center) | 0.00 | 0% |
| Paving | High Turnover (Sit Down Restaurant) | 0.00 | 0% |
| Paving | Other Asphalt Surfaces | 0.70 | 100% |
| Paving | Other Non-Asphalt Surfaces | 1.8 | 0% |
| Paving | Unenclosed Parking with Elevator | 0.00 | 100% |
| Paving | Library | 0.00 | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 346 | 0.03 | < 0.005 |
| 2027 | 0.00 | 346 | 0.03 | < 0.005 |
| 2028 | 0.00 | 346 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| Arena | Wood Fireplaces | 0 | 0 |
| Arena | Gas Fireplaces | 0 | 0 |
| Arena | Propane Fireplaces | 0 | 0 |
| Arena | Electric Fireplaces | 0 | 0 |
| Arena | No Fireplaces | 0 | 0 |
| Arena | Conventional Wood Stoves | 0 | 0 |
| Arena | Catalytic Wood Stoves | 0 | 0 |
| Arena | Non-Catalytic Wood Stoves | 0 | 0 |
| Arena | Pellet Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Wood Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Gas Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Propane Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Electric Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | No Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Conventional Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Non-Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Pellet Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Enclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Hotel | Wood Fireplaces | 0 | 0 |
| Hotel | Gas Fireplaces | 0 | 0 |
| Hotel | Propane Fireplaces | 0 | 0 |
| Hotel | Electric Fireplaces | 0 | 0 |
| Hotel | No Fireplaces | 0 | 0 |
| Hotel | Conventional Wood Stoves | 0 | 0 |
| Hotel | Catalytic Wood Stoves | 0 | 0 |
| Hotel | Non-Catalytic Wood Stoves | 0 | 0 |
| Hotel | Pellet Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |

| | | | |
|---|---|---|---|
| Unenclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Wood Fireplaces | 0 | 0 |
| Apartments Mid Rise | Gas Fireplaces | 0 | 0 |
| Apartments Mid Rise | Propane Fireplaces | 0 | 0 |
| Apartments Mid Rise | Electric Fireplaces | 0 | 0 |
| Apartments Mid Rise | No Fireplaces | 0 | 0 |
| Apartments Mid Rise | Conventional Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Catalytic Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Non-Catalytic Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Pellet Wood Stoves | 0 | 0 |
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Wood Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Gas Fireplaces | 0 | 0 |

| | | | |
|---|---|---|---|
| High Turnover (Sit Down Restaurant) | Propane Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Electric Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | No Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Conventional Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Non-Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Pellet Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Wood Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Gas Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Propane Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Electric Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | No Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Conventional Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Catalytic Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Non-Catalytic Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Pellet Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Wood Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Gas Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Propane Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Electric Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | No Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Conventional Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Catalytic Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Non-Catalytic Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Pellet Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |

| | | | |
|---|---|---|---|
| Unenclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Library | Wood Fireplaces | 0 | 0 |
| Library | Gas Fireplaces | 0 | 0 |
| Library | Propane Fireplaces | 0 | 0 |
| Library | Electric Fireplaces | 0 | 0 |
| Library | No Fireplaces | 0 | 0 |
| Library | Conventional Wood Stoves | 0 | 0 |
| Library | Catalytic Wood Stoves | 0 | 0 |
| Library | Non-Catalytic Wood Stoves | 0 | 0 |
| Library | Pellet Wood Stoves | 0 | 0 |

## 5.10.2. Architectural Coatings

| — | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| undefined | 272,160 | 90,720 | 1,110,000 | 370,000 | 6,534 |

## 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

## 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 1,140,498 | 261 | 0.0330 | 0.0040 | 1,622,174 |
| Government (Civic Center) | 3,332,394 | 261 | 0.0330 | 0.0040 | 4,739,789 |
| Arena | 1,189,499 | 261 | 0.0330 | 0.0040 | 5,307,441 |
| High Turnover (Sit Down Restaurant) | 346,303 | 261 | 0.0330 | 0.0040 | 1,151,316 |
| Enclosed Parking with Elevator | 926,549 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 676,320 | 261 | 0.0330 | 0.0040 | 0.00 |
| Hotel | 3,078,615 | 261 | 0.0330 | 0.0040 | 6,351,774 |
| Unenclosed Parking with Elevator | 394,520 | 261 | 0.0330 | 0.0040 | 0.00 |
| Apartments Mid Rise | 513,217 | 261 | 0.0330 | 0.0040 | 1,554,958 |
| Government (Civic Center) | 1,603,826 | 261 | 0.0330 | 0.0040 | 2,281,182 |
| High Turnover (Sit Down Restaurant) | 692,606 | 261 | 0.0330 | 0.0040 | 2,302,632 |
| Other Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 169,080 | 261 | 0.0330 | 0.0040 | 0.00 |
| Library | 239,818 | 261 | 0.0330 | 0.0040 | 1,070,049 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 1,139,902 | 261 | 0.0330 | 0.0040 | 1,622,174 |
| Government (Civic Center) | 3,330,652 | 261 | 0.0330 | 0.0040 | 4,739,789 |
| Arena | 1,185,743 | 261 | 0.0330 | 0.0040 | 5,307,441 |
| High Turnover (Sit Down Restaurant) | 296,615 | 261 | 0.0330 | 0.0040 | 1,151,316 |
| Enclosed Parking with Elevator | 926,549 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 676,320 | 261 | 0.0330 | 0.0040 | 0.00 |
| Hotel | 2,923,971 | 261 | 0.0330 | 0.0040 | 6,351,774 |
| Unenclosed Parking with Elevator | 394,520 | 261 | 0.0330 | 0.0040 | 0.00 |
| Apartments Mid Rise | 485,063 | 261 | 0.0330 | 0.0040 | 1,544,356 |
| Government (Civic Center) | 1,602,988 | 261 | 0.0330 | 0.0040 | 2,281,182 |
| High Turnover (Sit Down Restaurant) | 593,230 | 261 | 0.0330 | 0.0040 | 2,302,632 |
| Other Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 169,080 | 261 | 0.0330 | 0.0040 | 0.00 |
| Library | 239,061 | 261 | 0.0330 | 0.0040 | 1,070,049 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 4,849,900 | 607,377 |

| | | |
|---|---|---|
| Government (Civic Center) | 14,928,500 | 519,232 |
| Arena | 5,657,500 | 990,486 |
| High Turnover (Sit Down Restaurant) | 0.00 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Hotel | 36,135,000 | 193,539 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 9,249,100 | 96,162 |
| Government (Civic Center) | 6,820,200 | 1,209,971 |
| High Turnover (Sit Down Restaurant) | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 3,193,750 | 0.00 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 4,418,259 | 607,377 |
| Government (Civic Center) | 13,665,549 | 519,232 |
| Arena | 5,156,246 | 990,486 |
| High Turnover (Sit Down Restaurant) | 0.00 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Hotel | 31,867,457 | 193,539 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 7,851,561 | 96,162 |
| Government (Civic Center) | 6,243,211 | 1,209,971 |
| High Turnover (Sit Down Restaurant) | 0.00 | 0.00 |

| | | |
|---|---|---|
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 3,193,750 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 365 | 0.00 |
| Government (Civic Center) | 1,066 | 0.00 |
| Arena | 3.4 | 0.00 |
| High Turnover (Sit Down Restaurant) | 119 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Hotel | 230 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 75 | 0.00 |
| Government (Civic Center) | 513 | 0.00 |
| High Turnover (Sit Down Restaurant) | 238 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 23 | 0.00 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 365 | 0.00 |

| | | |
|---|---|---|
| Government (Civic Center) | 1,066 | 0.00 |
| Arena | 3.4 | 0.00 |
| High Turnover (Sit Down Restaurant) | 119 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Hotel | 230 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 75 | 0.00 |
| Government (Civic Center) | 513 | 0.00 |
| High Turnover (Sit Down Restaurant) | 238 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 23 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Arena | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Arena | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Hotel | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| Hotel | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| Hotel | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.5 | 2.5 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Arena | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Hotel | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| Hotel | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| Hotel | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.5 | 2.5 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|
| Forklifts | Diesel | Average | 6.0 | 8.0 | 82 | 0.20 |

### 5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|
| Forklifts | Diesel | Average | 6.0 | 8.0 | 82 | 0.20 |

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 5.1 | annual days of extreme heat |
| Extreme Precipitation | 4.2 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 0.00 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 2 | 2 | 2 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 2 | 2 | 2 |
| Wildfire | 1 | 2 | 2 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 5 | 3 | 3 | 3 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 2 | 1 | 3 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 2 | 2 | 2 |

| | | | | |
|---|---|---|---|---|
| Wildfire | 1 | 2 | 2 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 5 | 3 | 3 | 3 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

### 6.4.1. Temperature and Extreme Heat

| User Selected Measures | Co-Benefits Achieved | Exposure Reduction | Sensitivity Reduction | Adaptive Capacity Increase |
|---|---|---|---|---|
| D-3: Install Drought Resistant Landscaping | Water Conservation | — | 1.00 | 1.00 |

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 22 |
| AQ-PM | 81 |
| AQ-DPM | 86 |
| Drinking Water | 29 |
| Lead Risk Housing | 60 |
| Pesticides | 0.00 |

| | |
|---|---|
| Toxic Releases | 99 |
| Traffic | 95 |
| Effect Indicators | — |
| CleanUp Sites | 89 |
| Groundwater | 94 |
| Haz Waste Facilities/Generators | 67 |
| Impaired Water Bodies | 93 |
| Solid Waste | 55 |
| Sensitive Population | — |
| Asthma | 77 |
| Cardio-vascular | 83 |
| Low Birth Weights | 75 |
| Socioeconomic Factor Indicators | — |
| Education | 62 |
| Housing | 28 |
| Linguistic | 77 |
| Poverty | 50 |
| Unemployment | 43 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 57.92377775 |
| Employed | 62.37649172 |
| Median HI | 55.88348518 |
| Education | — |
| Bachelor's or higher | 53.18875914 |

| | |
|---|---|
| High school enrollment | 100 |
| Preschool enrollment | 48.45374054 |
| Transportation | — |
| Auto Access | 31.27165405 |
| Active commuting | 35.41639933 |
| Social | — |
| 2-parent households | 72.60361863 |
| Voting | 9.29038881 |
| Neighborhood | — |
| Alcohol availability | 51.72590787 |
| Park access | 27.21673297 |
| Retail density | 43.47491338 |
| Supermarket access | 40.56204286 |
| Tree canopy | 50.87899397 |
| Housing | — |
| Homeownership | 92.2751187 |
| Housing habitability | 75.06736815 |
| Low-inc homeowner severe housing cost burden | 74.6439112 |
| Low-inc renter severe housing cost burden | 51.52059541 |
| Uncrowded housing | 28.33311947 |
| Health Outcomes | — |
| Insured adults | 43.11561658 |
| Arthritis | 59.3 |
| Asthma ER Admissions | 30.5 |
| High Blood Pressure | 37.6 |
| Cancer (excluding skin) | 49.7 |
| Asthma | 94.4 |
| Coronary Heart Disease | 54.4 |

| | |
|---|---|
| Chronic Obstructive Pulmonary Disease | 74.0 |
| Diagnosed Diabetes | 25.3 |
| Life Expectancy at Birth | 63.6 |
| Cognitively Disabled | 50.3 |
| Physically  Disabled | 14.3 |
| Heart Attack ER Admissions | 25.8 |
| Mental Health Not Good | 69.9 |
| Chronic Kidney Disease | 45.1 |
| Obesity | 76.5 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 51.8 |
| Stroke | 51.7 |
| Health Risk Behaviors | — |
| Binge Drinking | 89.1 |
| Current Smoker | 71.8 |
| No Leisure Time for Physical Activity | 41.3 |
| Climate Change Exposures | — |
| Wildfire Risk | 0.0 |
| SLR Inundation Area | 0.0 |
| Children | 68.4 |
| Elderly | 14.5 |
| English Speaking | 25.4 |
| Foreign-born | 90.0 |
| Outdoor Workers | 75.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 11.0 |
| Traffic Density | 92.2 |
| Traffic Access | 61.6 |

| | |
|---|---|
| Other Indices | — |
| Hardship | 56.0 |
| Other Decision Support | — |
| 2016 Voting | 18.3 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 92 |
| Healthy Places Index Score for Project Location (b) | 51 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | Wilmington Long Beach Carson |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Land Use | Proposed Specific Plan Uses |
| Construction: Construction Phases | High-Level Assumptions Based on Completion mid-2028. |

| | |
|---|---|
| Construction: Off-Road Equipment | Equipment lists populated based on experiential knowledge. 100 hp Roller = Compactor<br>175 hp Crawler Tractor = Gradall<br>250 hp Crawler Tractor = Crawler Dozer<br>300 hp Paving Equip = Concrete Truck PTO |
| Construction: Dust From Material Movement | Quantities estimated based off preliminary design plans. |
| Construction: Trips and VMT | High-Level Estimates based on Project Scale and Schedule. |
| Construction: On-Road Fugitive Dust | Site will never be entirely unpaved/uncovered ground. |
| Construction: Paving | Subterranean parking structures will be concrete or A/C, not standard asphalt. |
| Operations: Hearths | No Hearths or Wood Stoves. |
| Operations: Architectural Coatings | Repainting every 20 years. |
| Operations: Water and Waste Water | Indoor water use rates obtained from Civic Center Specific Plan (December 2, 2025).<br>Restaurant indoor water use combined with New City Hall & Hotel.<br><br>Existing uses to be renovated were estimated by scaling factor of 75.78 gal/sf/year based on the New City Hall. |

# CalEEMod – Entertainment Retail Option

# Carson Civic Center - E/R Complex Option Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Carson Civic Center - E/R Complex Option |
| Construction Start Date | 6/1/2026 |
| Operational Year | 2050 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.5 |
| Precipitation (days) | 17 |
| Location | 33.83254920370301, -118.26290983813647 |
| County | Los Angeles-South Coast |
| City | Carson |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4617 |
| EDFZ | 7 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |
| App Version | 2022.1.1.35 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 64 | 1000sqft | 2.5 | 64,000 | 43,308 | 0.00 | — | Existing City Hall Reno |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 187 | 1000sqft | 1.8 | 187,000 | 37,023 | 0.00 | — | New City Hall |
| Arena | 124 | 1000sqft | 3.7 | 124,000 | 70,625 | 0.00 | — | Performing Arts Center |
| High Turnover (Sit Down Restaurant) | 10.0 | 1000sqft | 0.00 | 10,000 | 0.00 | 0.00 | — | New City Hall Restaurant |
| Enclosed Parking with Elevator | 670 | Space | 0.00 | 251,000 | 0.00 | 0.00 | — | Sub Pkg Level |
| Unenclosed Parking with Elevator | 240 | 1000sqft | 0.00 | 240,000 | 0.00 | 0.00 | — | M-U Podium Pkg |
| Regional Shopping Center | 130 | 1000sqft | 3.8 | 130,000 | 13,800 | 0.00 | — | R/E Complex Retail |
| Enclosed Parking with Elevator | 1,000 | Space | 0.00 | 375,000 | 0.00 | 0.00 | — | Retail/Ent Podium Parking |
| Apartments Mid Rise | 140 | Dwelling Unit | 1.5 | 134,400 | 5,610 | 0.00 | 300 | M-U Housing |
| Government (Civic Center) | 90 | 1000sqft | 3.8 | 90,000 | 86,275 | 0.00 | — | Ex Events Center Reno |
| High Turnover (Sit Down Restaurant) | 30 | 1000sqft | 0.00 | 30,000 | 0.00 | 0.00 | — | R/E Restaurant |
| Other Asphalt Surfaces | 0.70 | Acre | 0.70 | 0.00 | 0.00 | 0.00 | — | Internal Street |
| Other Non-Asphalt Surfaces | 2.0 | Acre | 1.8 | 0.00 | 0.00 | 0.00 | — | Hardscape |
| Unenclosed Parking with Elevator | 60 | 1000sqft | 0.00 | 60,000 | 0.00 | 0.00 | — | Bus Depot |
| Library | 30 | 1000sqft | 0.50 | 30,000 | 0.00 | 0.00 | — | Interactive Museum |
| Movie Theater (No Matinee) | 50 | 1000sqft | 0.00 | 50,000 | 0.00 | 0.00 | — | R/E "Mega Sports Bar" |

## 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|

| | | |
|---|---|---|
| Construction | C-2* | Limit Heavy-Duty Diesel Vehicle Idling |
| Construction | C-4* | Use Local and Sustainable Building Materials |
| Transportation | T-31-B* | Improve Destination Accessibility in Underserved Areas |
| Transportation | T-34* | Provide Bike Parking |
| Transportation | T-46* | Provide Transit Shelters |
| Energy | E-1 | Buildings Exceed 2019 Title 24 Building Envelope Energy Efficiency Standards |
| Energy | E-2 | Require Energy Efficient Appliances |
| Energy | E-3-A* | Require Energy Efficient Residential Boilers |
| Energy | E-3-B* | Require Energy Efficient Commercial Packaged Boilers |
| Energy | E-12-A | Install Alternative Type of Water Heater in Place of Gas Storage Tank Heater in Residences |
| Energy | E-12-B | Install Electric Space Heater in Place of Natural Gas Heaters in Residences |
| Energy | E-13 | Install Electric Ranges in Place of Gas Ranges |
| Energy | E-21* | Install Cool Pavement |
| Water | W-4 | Require Low-Flow Water Fixtures |
| Water | W-5 | Design Water-Efficient Landscapes |

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

# 2. Emissions Summary

## 2.1. Construction Emissions Compared Against Thresholds

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 68 | 94 | 125 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.4 | 6.5 | — | 49,907 | 49,907 | 2.2 | 4.9 | 90 | 51,517 |
| Mit. | 68 | 94 | 125 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.4 | 6.5 | — | 49,907 | 49,907 | 2.2 | 4.9 | 90 | 51,517 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 67 | 95 | 119 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.3 | 6.4 | — | 49,507 | 49,507 | 2.1 | 4.9 | 2.3 | 51,025 |
| Mit. | 67 | 95 | 119 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.3 | 6.4 | — | 49,507 | 49,507 | 2.1 | 4.9 | 2.3 | 51,025 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 23 | 46 | 57 | 0.15 | 1.1 | 8.2 | 9.3 | 1.0 | 1.9 | 3.0 | — | 22,679 | 22,679 | 0.88 | 2.0 | 18 | 23,319 |
| Mit. | 23 | 46 | 57 | 0.15 | 1.1 | 8.2 | 9.3 | 1.0 | 1.9 | 3.0 | — | 22,679 | 22,679 | 0.88 | 2.0 | 18 | 23,319 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.2 | 8.4 | 10 | 0.03 | 0.21 | 1.5 | 1.7 | 0.19 | 0.36 | 0.55 | — | 3,755 | 3,755 | 0.15 | 0.33 | 2.9 | 3,861 |
| Mit. | 4.2 | 8.4 | 10 | 0.03 | 0.21 | 1.5 | 1.7 | 0.19 | 0.36 | 0.55 | — | 3,755 | 3,755 | 0.15 | 0.33 | 2.9 | 3,861 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Exceeds (Daily Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 75 | 100 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Exceeds (Average Daily) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 75 | 100 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |

## 2.2. Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 7.2 | 77 | 81 | 0.23 | 2.3 | 15 | 17 | 2.1 | 4.4 | 6.5 | — | 33,807 | 33,807 | 1.7 | 3.4 | 59 | 34,911 |
| 2027 | 9.4 | 94 | 116 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.3 | 6.4 | — | 49,907 | 49,907 | 2.2 | 4.9 | 90 | 51,517 |
| 2028 | 68 | 82 | 125 | 0.28 | 2.0 | 15 | 17 | 1.9 | 3.7 | 5.6 | — | 41,953 | 41,953 | 1.4 | 3.0 | 67 | 42,943 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 6.5 | 80 | 79 | 0.27 | 2.1 | 16 | 18 | 1.9 | 4.3 | 6.2 | — | 41,186 | 41,186 | 2.1 | 4.7 | 2.1 | 42,641 |
| 2027 | 9.3 | 95 | 110 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.3 | 6.4 | — | 49,507 | 49,507 | 2.0 | 4.9 | 2.3 | 51,025 |
| 2028 | 67 | 83 | 119 | 0.28 | 2.0 | 15 | 17 | 1.9 | 3.7 | 5.6 | — | 41,475 | 41,475 | 1.4 | 3.0 | 1.7 | 42,403 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.9 | 22 | 22 | 0.07 | 0.60 | 4.1 | 4.7 | 0.56 | 1.1 | 1.7 | — | 10,120 | 10,120 | 0.51 | 1.1 | 8.0 | 10,462 |
| 2027 | 4.9 | 46 | 57 | 0.15 | 1.1 | 8.2 | 9.3 | 1.0 | 1.9 | 3.0 | — | 22,679 | 22,679 | 0.88 | 2.0 | 18 | 23,319 |
| 2028 | 23 | 20 | 30 | 0.07 | 0.48 | 3.9 | 4.4 | 0.45 | 0.93 | 1.4 | — | 10,365 | 10,365 | 0.36 | 0.77 | 7.4 | 10,610 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.34 | 4.0 | 4.0 | 0.01 | 0.11 | 0.75 | 0.86 | 0.10 | 0.21 | 0.31 | — | 1,675 | 1,675 | 0.08 | 0.18 | 1.3 | 1,732 |
| 2027 | 0.89 | 8.4 | 10 | 0.03 | 0.21 | 1.5 | 1.7 | 0.19 | 0.36 | 0.55 | — | 3,755 | 3,755 | 0.15 | 0.33 | 2.9 | 3,861 |
| 2028 | 4.2 | 3.7 | 5.4 | 0.01 | 0.09 | 0.71 | 0.79 | 0.08 | 0.17 | 0.25 | — | 1,716 | 1,716 | 0.06 | 0.13 | 1.2 | 1,757 |

## 2.3. Construction Emissions by Year, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Year | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily - Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 7.2 | 77 | 81 | 0.23 | 2.3 | 15 | 17 | 2.1 | 4.4 | 6.5 | — | 33,807 | 33,807 | 1.7 | 3.4 | 59 | 34,911 |
| 2027 | 9.4 | 94 | 116 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.3 | 6.4 | — | 49,907 | 49,907 | 2.2 | 4.9 | 90 | 51,517 |
| 2028 | 68 | 82 | 125 | 0.28 | 2.0 | 15 | 17 | 1.9 | 3.7 | 5.6 | — | 41,953 | 41,953 | 1.4 | 3.0 | 67 | 42,943 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 6.5 | 80 | 79 | 0.27 | 2.1 | 16 | 18 | 1.9 | 4.3 | 6.2 | — | 41,186 | 41,186 | 2.1 | 4.7 | 2.1 | 42,641 |
| 2027 | 9.3 | 95 | 110 | 0.34 | 2.3 | 18 | 20 | 2.2 | 4.3 | 6.4 | — | 49,507 | 49,507 | 2.0 | 4.9 | 2.3 | 51,025 |
| 2028 | 67 | 83 | 119 | 0.28 | 2.0 | 15 | 17 | 1.9 | 3.7 | 5.6 | — | 41,475 | 41,475 | 1.4 | 3.0 | 1.7 | 42,403 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 1.9 | 22 | 22 | 0.07 | 0.60 | 4.1 | 4.7 | 0.56 | 1.1 | 1.7 | — | 10,120 | 10,120 | 0.51 | 1.1 | 8.0 | 10,462 |
| 2027 | 4.9 | 46 | 57 | 0.15 | 1.1 | 8.2 | 9.3 | 1.0 | 1.9 | 3.0 | — | 22,679 | 22,679 | 0.88 | 2.0 | 18 | 23,319 |
| 2028 | 23 | 20 | 30 | 0.07 | 0.48 | 3.9 | 4.4 | 0.45 | 0.93 | 1.4 | — | 10,365 | 10,365 | 0.36 | 0.77 | 7.4 | 10,610 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2026 | 0.34 | 4.0 | 4.0 | 0.01 | 0.11 | 0.75 | 0.86 | 0.10 | 0.21 | 0.31 | — | 1,675 | 1,675 | 0.08 | 0.18 | 1.3 | 1,732 |
| 2027 | 0.89 | 8.4 | 10 | 0.03 | 0.21 | 1.5 | 1.7 | 0.19 | 0.36 | 0.55 | — | 3,755 | 3,755 | 0.15 | 0.33 | 2.9 | 3,861 |
| 2028 | 4.2 | 3.7 | 5.4 | 0.01 | 0.09 | 0.71 | 0.79 | 0.08 | 0.17 | 0.25 | — | 1,716 | 1,716 | 0.06 | 0.13 | 1.2 | 1,757 |

## 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 32 | 9.7 | 91 | 0.05 | 0.66 | 0.00 | 0.66 | 0.62 | 0.00 | 0.62 | 1,799 | 19,834 | 21,633 | 182 | 0.70 | 66 | 26,471 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mit. | 32 | 9.7 | 91 | 0.05 | 0.66 | 0.00 | 0.66 | 0.62 | 0.00 | 0.62 | 1,782 | 19,606 | 21,388 | 181 | 0.66 | 66 | 26,166 |
| % Reduced | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 1% | 1% | 1% | 1% | 7% | — | 1% |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 20 | 9.0 | 11 | 0.05 | 0.53 | 0.00 | 0.53 | 0.52 | 0.00 | 0.52 | 1,799 | 19,519 | 21,318 | 182 | 0.70 | 66 | 26,155 |
| Mit. | 20 | 9.0 | 11 | 0.05 | 0.52 | 0.00 | 0.52 | 0.52 | 0.00 | 0.52 | 1,782 | 19,291 | 21,073 | 181 | 0.66 | 66 | 25,850 |
| % Reduced | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 1% | 1% | 1% | 1% | 7% | — | 1% |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 28 | 8.8 | 64 | 0.05 | 0.61 | 0.00 | 0.61 | 0.58 | 0.00 | 0.58 | 1,799 | 19,472 | 21,271 | 182 | 0.70 | 66 | 26,108 |
| Mit. | 28 | 8.8 | 64 | 0.05 | 0.61 | 0.00 | 0.61 | 0.58 | 0.00 | 0.58 | 1,782 | 19,244 | 21,025 | 181 | 0.65 | 66 | 25,802 |
| % Reduced | — | < 0.5% | < 0.5% | — | — | — | — | — | — | — | 1% | 1% | 1% | 1% | 7% | — | 1% |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 5.2 | 1.6 | 12 | 0.01 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 | 0.11 | 298 | 3,224 | 3,522 | 30 | 0.12 | 11 | 4,322 |
| Mit. | 5.2 | 1.6 | 12 | 0.01 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 | 0.11 | 295 | 3,186 | 3,481 | 30 | 0.11 | 11 | 4,272 |
| % Reduced | < 0.5% | < 0.5% | < 0.5% | < 0.5% | < 0.5% | — | < 0.5% | < 0.5% | — | < 0.5% | 1% | 1% | 1% | 1% | 7% | — | 1% |
| Exceeds (Daily Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 55 | 55 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Exceeds (Average Daily) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Threshold | 55 | 55 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 32 | 0.67 | 79 | < 0.005 | 0.13 | — | 0.13 | 0.10 | — | 0.10 | — | 315 | 315 | 0.01 | < 0.005 | — | 316 |
| Energy | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 18,056 | 18,056 | 2.0 | 0.17 | — | 18,157 |
| Water | — | — | — | — | — | — | — | — | — | — | 211 | 549 | 760 | 22 | 0.52 | — | 1,457 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 32 | 9.7 | 91 | 0.05 | 0.66 | 0.00 | 0.66 | 0.62 | 0.00 | 0.62 | 1,799 | 19,834 | 21,633 | 182 | 0.70 | 66 | 26,471 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 18,056 | 18,056 | 2.0 | 0.17 | — | 18,157 |
| Water | — | — | — | — | — | — | — | — | — | — | 211 | 549 | 760 | 22 | 0.52 | — | 1,457 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 20 | 9.0 | 11 | 0.05 | 0.53 | 0.00 | 0.53 | 0.52 | 0.00 | 0.52 | 1,799 | 19,519 | 21,318 | 182 | 0.70 | 66 | 26,155 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 28 | 0.46 | 54 | < 0.005 | 0.09 | — | 0.09 | 0.07 | — | 0.07 | — | 216 | 216 | 0.01 | < 0.005 | — | 216 |
| Energy | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 18,056 | 18,056 | 2.0 | 0.17 | — | 18,157 |
| Water | — | — | — | — | — | — | — | — | — | — | 211 | 549 | 760 | 22 | 0.52 | — | 1,457 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 | |
| Off-Road | 0.19 | 1.8 | 4.4 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 652 | 652 | 0.03 | 0.01 | — | 654 |
| Total | 28 | 8.8 | 64 | 0.05 | 0.61 | 0.00 | 0.61 | 0.58 | 0.00 | 0.58 | 1,799 | 19,472 | 21,271 | 182 | 0.70 | 66 | 26,108 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 5.1 | 0.08 | 9.9 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | — | 36 |
| Energy | 0.07 | 1.2 | 0.97 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 2,989 | 2,989 | 0.33 | 0.03 | — | 3,006 |
| Water | — | — | — | — | — | — | — | — | — | — | 35 | 91 | 126 | 3.6 | 0.09 | — | 241 |
| Waste | — | — | — | — | — | — | — | — | — | — | 263 | 0.00 | 263 | 26 | 0.00 | — | 920 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 11 | 11 | |
| Off-Road | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 5.2 | 1.6 | 12 | 0.01 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 | 0.11 | 298 | 3,224 | 3,522 | 30 | 0.12 | 11 | 4,322 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 32 | 0.67 | 79 | < 0.005 | 0.13 | — | 0.13 | 0.10 | — | 0.10 | — | 315 | 315 | 0.01 | < 0.005 | — | 316 |
| Energy | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 17,873 | 17,873 | 2.0 | 0.17 | — | 17,972 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Water | — | — | — | — | — | — | — | — | — | — | 193 | 504 | 697 | 20 | 0.48 | — | 1,337 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 32 | 9.7 | 91 | 0.05 | 0.66 | 0.00 | 0.66 | 0.62 | 0.00 | 0.62 | 1,782 | 19,606 | 21,388 | 181 | 0.66 | 66 | 26,166 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 17,873 | 17,873 | 2.0 | 0.17 | — | 17,972 |
| Water | — | — | — | — | — | — | — | — | — | — | 193 | 504 | 697 | 20 | 0.48 | — | 1,337 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Off-Road | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 20 | 9.0 | 11 | 0.05 | 0.52 | 0.00 | 0.52 | 0.52 | 0.00 | 0.52 | 1,782 | 19,291 | 21,073 | 181 | 0.66 | 66 | 25,850 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 28 | 0.46 | 54 | < 0.005 | 0.09 | — | 0.09 | 0.07 | — | 0.07 | — | 216 | 216 | 0.01 | < 0.005 | — | 216 |
| Energy | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 17,873 | 17,873 | 2.0 | 0.17 | — | 17,972 |
| Water | — | — | — | — | — | — | — | — | — | — | 193 | 504 | 697 | 20 | 0.48 | — | 1,337 |
| Waste | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Off-Road | 0.19 | 1.8 | 4.4 | 0.01 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 652 | 652 | 0.03 | 0.01 | — | 654 |
| Total | 28 | 8.8 | 64 | 0.05 | 0.61 | 0.00 | 0.61 | 0.58 | 0.00 | 0.58 | 1,782 | 19,244 | 21,025 | 181 | 0.65 | 66 | 25,802 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 5.1 | 0.08 | 9.9 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | — | 36 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.07 | 1.2 | 0.97 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 2,959 | 2,959 | 0.33 | 0.03 | — | 2,975 |
| Water | — | — | — | — | — | — | — | — | — | — | 32 | 83 | 115 | 3.3 | 0.08 | — | 221 |
| Waste | — | — | — | — | — | — | — | — | — | — | 263 | 0.00 | 263 | 26 | 0.00 | — | 920 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 11 | 11 |
| Off-Road | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 5.2 | 1.6 | 12 | 0.01 | 0.11 | 0.00 | 0.11 | 0.11 | 0.00 | 0.11 | 295 | 3,186 | 3,481 | 30 | 0.11 | 11 | 4,272 |

# 3. Construction Emissions Details

## 3.1. Demolition (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.4 | 32 | 30 | 0.06 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 5,987 | 5,987 | 0.24 | 0.05 | — | 6,007 |
| Dust From Material Movement | — | — | — | — | — | 2.1 | 2.1 | — | 0.92 | 0.92 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.44 | 0.44 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.61 | 5.7 | 5.4 | 0.01 | 0.22 | — | 0.22 | 0.20 | — | 0.20 | — | 1,066 | 1,066 | 0.04 | 0.01 | — | 1,070 |
| Dust From Material Movement | — | — | — | — | — | 0.38 | 0.38 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.08 | 0.08 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 1.0 | 0.98 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 177 | 177 | 0.01 | < 0.005 | — | 177 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | < 0.005 | 0.14 | 0.07 | < 0.005 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 125 | 125 | 0.01 | 0.02 | 0.34 | 130 |
| Hauling | 0.13 | 9.8 | 3.9 | 0.06 | 0.11 | 2.2 | 2.3 | 0.11 | 0.61 | 0.71 | — | 8,163 | 8,163 | 0.45 | 1.3 | 18 | 8,581 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 22 | 22 | < 0.005 | < 0.005 | 0.03 | 23 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.02 | 1.8 | 0.69 | 0.01 | 0.02 | 0.39 | 0.41 | 0.02 | 0.11 | 0.13 | — | 1,454 | 1,454 | 0.08 | 0.23 | 1.4 | 1,526 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 3.7 | 3.7 | < 0.005 | < 0.005 | < 0.005 | 3.8 |
| Hauling | < 0.005 | 0.34 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.08 | < 0.005 | 0.02 | 0.02 | — | 241 | 241 | 0.01 | 0.04 | 0.23 | 253 |

## 3.2. Demolition (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.4 | 32 | 30 | 0.06 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 5,987 | 5,987 | 0.24 | 0.05 | — | 6,007 |
| Dust From Material Movement | — | — | — | — | — | 2.1 | 2.1 | — | 0.92 | 0.92 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.44 | 0.44 | — | 0.07 | 0.07 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.37 | 0.37 | < 0.005 | 0.04 | 0.04 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.61 | 5.7 | 5.4 | 0.01 | 0.22 | — | 0.22 | 0.20 | — | 0.20 | — | 1,066 | 1,066 | 0.04 | 0.01 | — | 1,070 |
| Dust From Material Movement | — | — | — | — | — | 0.38 | 0.38 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Demoliti | — | — | — | — | — | 0.08 | 0.08 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.11 | 1.0 | 0.98 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 177 | 177 | 0.01 | < 0.005 | — | 177 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Demolition | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | < 0.005 | 0.14 | 0.07 | < 0.005 | < 0.005 | 0.03 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 125 | 125 | 0.01 | 0.02 | 0.34 | 130 |
| Hauling | 0.13 | 9.8 | 3.9 | 0.06 | 0.11 | 2.2 | 2.3 | 0.11 | 0.61 | 0.71 | — | 8,163 | 8,163 | 0.45 | 1.3 | 18 | 8,581 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.03 | 0.01 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 22 | 22 | < 0.005 | < 0.005 | 0.03 | 23 |
| Hauling | 0.02 | 1.8 | 0.69 | 0.01 | 0.02 | 0.39 | 0.41 | 0.02 | 0.11 | 0.13 | — | 1,454 | 1,454 | 0.08 | 0.23 | 1.4 | 1,526 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 3.7 | 3.7 | < 0.005 | < 0.005 | < 0.005 | 3.8 |
| Hauling | < 0.005 | 0.34 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.08 | < 0.005 | 0.02 | 0.02 | — | 241 | 241 | 0.01 | 0.04 | 0.23 | 253 |

## 3.3. Site Preparation (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.2 | 20 | 21 | 0.04 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 3,795 | 3,795 | 0.15 | 0.03 | — | 3,809 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.56 | 0.56 | < 0.005 | 0.06 | 0.06 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.2 | 20 | 21 | 0.04 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 3,795 | 3,795 | 0.15 | 0.03 | — | 3,809 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.56 | 0.56 | < 0.005 | 0.06 | 0.06 | — | 10 | 10 | < 0.005 | < 0.005 | < 0.005 | 11 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.40 | 3.6 | 3.7 | 0.01 | 0.14 | — | 0.14 | 0.13 | — | 0.13 | — | 676 | 676 | 0.03 | 0.01 | — | 678 |
| Dust From Material Movement | — | — | — | — | — | 0.33 | 0.33 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.66 | 0.68 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 112 | 112 | < 0.005 | < 0.005 | — | 112 |
| Dust From Material Movement | — | — | — | — | — | 0.06 | 0.06 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | 0.01 | 0.55 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 1.3 | 522 |
| Hauling | 0.17 | 13 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,883 | 10,883 | 0.60 | 1.7 | 24 | 11,441 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.70 | 8.8 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,055 | 2,055 | 0.09 | 0.08 | 0.19 | 2,080 |
| Vendor | 0.01 | 0.58 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 0.03 | 521 |
| Hauling | 0.16 | 14 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,888 | 10,888 | 0.60 | 1.7 | 0.63 | 11,422 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.10 | 0.05 | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 89 | 89 | < 0.005 | 0.01 | 0.10 | 93 |
| Hauling | 0.03 | 2.5 | 0.92 | 0.01 | 0.03 | 0.52 | 0.55 | 0.03 | 0.14 | 0.17 | — | 1,938 | 1,938 | 0.11 | 0.31 | 1.9 | 2,035 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.02 | 15 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.01 | 0.45 | 0.17 | < 0.005 | < 0.005 | 0.10 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 321 | 321 | 0.02 | 0.05 | 0.31 | 337 |

## 3.4. Site Preparation (2026) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.2 | 20 | 21 | 0.04 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 3,795 | 3,795 | 0.15 | 0.03 | — | 3,809 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | < 0.005 | 0.56 | 0.56 | < 0.005 | 0.06 | 0.06 | — | 10.0 | 10.0 | < 0.005 | < 0.005 | 0.02 | 11 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.2 | 20 | 21 | 0.04 | 0.78 | — | 0.78 | 0.72 | — | 0.72 | — | 3,795 | 3,795 | 0.15 | 0.03 | — | 3,809 |
| Dust From Material Movement | — | — | — | — | — | 1.8 | 1.8 | — | 0.89 | 0.89 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.56 | 0.56 | < 0.005 | 0.06 | 0.06 | — | 10 | 10 | < 0.005 | < 0.005 | < 0.005 | 11 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.40 | 3.6 | 3.7 | 0.01 | 0.14 | — | 0.14 | 0.13 | — | 0.13 | — | 676 | 676 | 0.03 | 0.01 | — | 678 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.33 | 0.33 | — | 0.16 | 0.16 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.01 | 0.01 | — | 1.8 | 1.8 | < 0.005 | < 0.005 | < 0.005 | 1.9 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.66 | 0.68 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 112 | 112 | < 0.005 | < 0.005 | — | 112 |
| Dust From Material Movement | — | — | — | — | — | 0.06 | 0.06 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.02 | 0.02 | < 0.005 | < 0.005 | < 0.005 | — | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.62 | 10 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,168 | 2,168 | 0.09 | 0.08 | 7.3 | 2,200 |
| Vendor | 0.01 | 0.55 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 1.3 | 522 |
| Hauling | 0.17 | 13 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,883 | 10,883 | 0.60 | 1.7 | 24 | 11,441 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.59 | 0.70 | 8.8 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,055 | 2,055 | 0.09 | 0.08 | 0.19 | 2,080 |
| Vendor | 0.01 | 0.58 | 0.27 | < 0.005 | 0.01 | 0.14 | 0.14 | < 0.005 | 0.04 | 0.04 | — | 499 | 499 | 0.02 | 0.07 | 0.03 | 521 |
| Hauling | 0.16 | 14 | 5.2 | 0.07 | 0.14 | 3.0 | 3.1 | 0.14 | 0.81 | 0.95 | — | 10,888 | 10,888 | 0.60 | 1.7 | 0.63 | 11,422 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.14 | 1.6 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 371 | 371 | 0.02 | 0.01 | 0.57 | 376 |
| Vendor | < 0.005 | 0.10 | 0.05 | < 0.005 | < 0.005 | 0.02 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 89 | 89 | < 0.005 | 0.01 | 0.10 | 93 |
| Hauling | 0.03 | 2.5 | 0.92 | 0.01 | 0.03 | 0.52 | 0.55 | 0.03 | 0.14 | 0.17 | — | 1,938 | 1,938 | 0.11 | 0.31 | 1.9 | 2,035 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Worker | 0.02 | 0.02 | 0.30 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62 |
| Vendor | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.02 | 15 |
| Hauling | 0.01 | 0.45 | 0.17 | < 0.005 | < 0.005 | 0.10 | 0.10 | < 0.005 | 0.03 | 0.03 | — | 321 | 321 | 0.02 | 0.05 | 0.31 | 337 |

## 3.5. Grading (2026) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.5 | 23 | 25 | 0.05 | 0.92 | — | 0.92 | 0.85 | — | 0.85 | — | 4,771 | 4,771 | 0.19 | 0.04 | — | 4,787 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.1 | 1.1 | < 0.005 | 0.11 | 0.11 | — | 17 | 17 | < 0.005 | < 0.005 | < 0.005 | 18 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.43 | 3.9 | 4.3 | 0.01 | 0.16 | — | 0.16 | 0.15 | — | 0.15 | — | 822 | 822 | 0.03 | 0.01 | — | 824 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.18 | 0.18 | < 0.005 | 0.02 | 0.02 | — | 2.9 | 2.9 | < 0.005 | < 0.005 | < 0.005 | 3.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 0.08 | 0.72 | 0.78 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 136 | 136 | 0.01 | < 0.005 | — | 136 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.47 | 0.47 | < 0.005 | < 0.005 | < 0.005 | 0.50 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.73 | 0.87 | 11 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,569 | 2,569 | 0.12 | 0.09 | 0.24 | 2,600 |
| Vendor | 0.01 | 0.29 | 0.14 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 250 | 250 | 0.01 | 0.04 | 0.02 | 260 |
| Hauling | 0.24 | 20 | 7.8 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,332 | 16,332 | 0.90 | 2.6 | 0.95 | 17,133 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.16 | 2.0 | 0.00 | 0.00 | 0.45 | 0.45 | 0.00 | 0.10 | 0.10 | — | 449 | 449 | 0.02 | 0.02 | 0.68 | 455 |
| Vendor | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 43 | 43 | < 0.005 | 0.01 | 0.05 | 45 |
| Hauling | 0.04 | 3.6 | 1.3 | 0.02 | 0.04 | 0.76 | 0.80 | 0.04 | 0.21 | 0.24 | — | 2,812 | 2,812 | 0.16 | 0.45 | 2.7 | 2,952 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.03 | 0.36 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 74 | 74 | < 0.005 | < 0.005 | 0.11 | 75 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.1 | 7.1 | < 0.005 | < 0.005 | 0.01 | 7.4 |
| Hauling | 0.01 | 0.65 | 0.24 | < 0.005 | 0.01 | 0.14 | 0.15 | 0.01 | 0.04 | 0.04 | — | 466 | 466 | 0.03 | 0.07 | 0.45 | 489 |

## 3.6. Grading (2026) - Mitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.5 | 23 | 25 | 0.05 | 0.92 | — | 0.92 | 0.85 | — | 0.85 | — | 4,771 | 4,771 | 0.19 | 0.04 | — | 4,787 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.1 | 1.1 | < 0.005 | 0.11 | 0.11 | — | 17 | 17 | < 0.005 | < 0.005 | < 0.005 | 18 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.43 | 3.9 | 4.3 | 0.01 | 0.16 | — | 0.16 | 0.15 | — | 0.15 | — | 822 | 822 | 0.03 | 0.01 | — | 824 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.18 | 0.18 | < 0.005 | 0.02 | 0.02 | — | 2.9 | 2.9 | < 0.005 | < 0.005 | < 0.005 | 3.0 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.72 | 0.78 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 136 | 136 | 0.01 | < 0.005 | — | 136 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.47 | 0.47 | < 0.005 | < 0.005 | < 0.005 | 0.50 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.73 | 0.87 | 11 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,569 | 2,569 | 0.12 | 0.09 | 0.24 | 2,600 |
| Vendor | 0.01 | 0.29 | 0.14 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 250 | 250 | 0.01 | 0.04 | 0.02 | 260 |
| Hauling | 0.24 | 20 | 7.8 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,332 | 16,332 | 0.90 | 2.6 | 0.95 | 17,133 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.16 | 2.0 | 0.00 | 0.00 | 0.45 | 0.45 | 0.00 | 0.10 | 0.10 | — | 449 | 449 | 0.02 | 0.02 | 0.68 | 455 |
| Vendor | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 43 | 43 | < 0.005 | 0.01 | 0.05 | 45 |
| Hauling | 0.04 | 3.6 | 1.3 | 0.02 | 0.04 | 0.76 | 0.80 | 0.04 | 0.21 | 0.24 | — | 2,812 | 2,812 | 0.16 | 0.45 | 2.7 | 2,952 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.03 | 0.36 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 74 | 74 | < 0.005 | < 0.005 | 0.11 | 75 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.1 | 7.1 | < 0.005 | < 0.005 | 0.01 | 7.4 |
| Hauling | 0.01 | 0.65 | 0.24 | < 0.005 | 0.01 | 0.14 | 0.15 | 0.01 | 0.04 | 0.04 | — | 466 | 466 | 0.03 | 0.07 | 0.45 | 489 |

## 3.7. Grading (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 20 | 24 | 0.05 | 0.77 | — | 0.77 | 0.71 | — | 0.71 | — | 4,771 | 4,771 | 0.19 | 0.04 | — | 4,787 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.1 | 1.1 | < 0.005 | 0.11 | 0.11 | — | 16 | 16 | < 0.005 | < 0.005 | 0.03 | 17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 20 | 24 | 0.05 | 0.77 | — | 0.77 | 0.71 | — | 0.71 | — | 4,771 | 4,771 | 0.19 | 0.04 | — | 4,787 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.1 | 1.1 | < 0.005 | 0.11 | 0.11 | — | 16 | 16 | < 0.005 | < 0.005 | < 0.005 | 17 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.41 | 3.7 | 4.2 | 0.01 | 0.14 | — | 0.14 | 0.13 | — | 0.13 | — | 859 | 859 | 0.03 | 0.01 | — | 862 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 2.9 | 2.9 | < 0.005 | < 0.005 | < 0.005 | 3.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.67 | 0.78 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 142 | 142 | 0.01 | < 0.005 | — | 143 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.49 | 0.49 | < 0.005 | < 0.005 | < 0.005 | 0.51 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.71 | 0.69 | 12 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,658 | 2,658 | 0.11 | 0.09 | 8.3 | 2,697 |
| Vendor | 0.01 | 0.26 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.64 | 256 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.26 | 19 | 7.5 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,001 | 16,001 | 0.79 | 2.6 | 34 | 16,831 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.70 | 0.86 | 10 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,520 | 2,520 | 0.04 | 0.09 | 0.21 | 2,549 |
| Vendor | 0.01 | 0.27 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.02 | 255 |
| Hauling | 0.24 | 20 | 7.6 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,008 | 16,008 | 0.79 | 2.6 | 0.88 | 16,806 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.16 | 1.9 | 0.00 | 0.00 | 0.47 | 0.47 | 0.00 | 0.11 | 0.11 | — | 460 | 460 | 0.01 | 0.02 | 0.64 | 466 |
| Vendor | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 44 | 44 | < 0.005 | 0.01 | 0.05 | 46 |
| Hauling | 0.04 | 3.6 | 1.4 | 0.02 | 0.04 | 0.79 | 0.83 | 0.04 | 0.22 | 0.26 | — | 2,881 | 2,881 | 0.14 | 0.47 | 2.6 | 3,027 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.03 | 0.35 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 76 | 76 | < 0.005 | < 0.005 | 0.11 | 77 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.3 | 7.3 | < 0.005 | < 0.005 | 0.01 | 7.6 |
| Hauling | 0.01 | 0.66 | 0.25 | < 0.005 | 0.01 | 0.14 | 0.15 | 0.01 | 0.04 | 0.05 | — | 477 | 477 | 0.02 | 0.08 | 0.44 | 501 |

## 3.8. Grading (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 20 | 24 | 0.05 | 0.77 | — | 0.77 | 0.71 | — | 0.71 | — | 4,771 | 4,771 | 0.19 | 0.04 | — | 4,787 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.1 | 1.1 | < 0.005 | 0.11 | 0.11 | — | 16 | 16 | < 0.005 | < 0.005 | 0.03 | 17 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.3 | 20 | 24 | 0.05 | 0.77 | — | 0.77 | 0.71 | — | 0.71 | — | 4,771 | 4,771 | 0.19 | 0.04 | — | 4,787 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | 1.1 | 1.1 | < 0.005 | 0.11 | 0.11 | — | 16 | 16 | < 0.005 | < 0.005 | < 0.005 | 17 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.41 | 3.7 | 4.2 | 0.01 | 0.14 | — | 0.14 | 0.13 | — | 0.13 | — | 859 | 859 | 0.03 | 0.01 | — | 862 |
| Dust From Material Movement | — | — | — | — | — | 0.07 | 0.07 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 2.9 | 2.9 | < 0.005 | < 0.005 | < 0.005 | 3.1 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.67 | 0.78 | < 0.005 | 0.03 | — | 0.03 | 0.02 | — | 0.02 | — | 142 | 142 | 0.01 | < 0.005 | — | 143 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.49 | 0.49 | < 0.005 | < 0.005 | < 0.005 | 0.51 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.71 | 0.69 | 12 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,658 | 2,658 | 0.11 | 0.09 | 8.3 | 2,697 |
| Vendor | 0.01 | 0.26 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.64 | 256 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.26 | 19 | 7.5 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,001 | 16,001 | 0.79 | 2.6 | 34 | 16,831 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.70 | 0.86 | 10 | 0.00 | 0.00 | 2.6 | 2.6 | 0.00 | 0.61 | 0.61 | — | 2,520 | 2,520 | 0.04 | 0.09 | 0.21 | 2,549 |
| Vendor | 0.01 | 0.27 | 0.13 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 245 | 245 | 0.01 | 0.03 | 0.02 | 255 |
| Hauling | 0.24 | 20 | 7.6 | 0.11 | 0.21 | 4.4 | 4.7 | 0.21 | 1.2 | 1.4 | — | 16,008 | 16,008 | 0.79 | 2.6 | 0.88 | 16,806 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.16 | 1.9 | 0.00 | 0.00 | 0.47 | 0.47 | 0.00 | 0.11 | 0.11 | — | 460 | 460 | 0.01 | 0.02 | 0.64 | 466 |
| Vendor | < 0.005 | 0.05 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 44 | 44 | < 0.005 | 0.01 | 0.05 | 46 |
| Hauling | 0.04 | 3.6 | 1.4 | 0.02 | 0.04 | 0.79 | 0.83 | 0.04 | 0.22 | 0.26 | — | 2,881 | 2,881 | 0.14 | 0.47 | 2.6 | 3,027 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.03 | 0.35 | 0.00 | 0.00 | 0.08 | 0.08 | 0.00 | 0.02 | 0.02 | — | 76 | 76 | < 0.005 | < 0.005 | 0.11 | 77 |
| Vendor | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | — | 7.3 | 7.3 | < 0.005 | < 0.005 | 0.01 | 7.6 |
| Hauling | 0.01 | 0.66 | 0.25 | < 0.005 | 0.01 | 0.14 | 0.15 | 0.01 | 0.04 | 0.05 | — | 477 | 477 | 0.02 | 0.08 | 0.44 | 501 |

## 3.9. Building Construction (2027) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | 0.01 | 5.2 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | < 0.005 | 5.2 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.1 | 27 | 30 | 0.06 | 0.86 | — | 0.86 | 0.79 | — | 0.79 | — | 5,826 | 5,826 | 0.24 | 0.05 | — | 5,846 |
| Dust From Material Movement | — | — | — | — | — | 0.29 | 0.29 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 3.5 | 3.5 | < 0.005 | < 0.005 | < 0.005 | 3.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.57 | 4.9 | 5.5 | 0.01 | 0.16 | — | 0.16 | 0.14 | — | 0.14 | — | 965 | 965 | 0.04 | 0.01 | — | 968 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.58 | 0.58 | < 0.005 | < 0.005 | < 0.005 | 0.61 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 24 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,316 | 5,316 | 0.22 | 0.19 | 17 | 5,394 |
| Vendor | 0.22 | 7.9 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,338 | 7,338 | 0.31 | 1.0 | 19 | 7,667 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.3 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,334 | 5,334 | 0.26 | 0.87 | 11 | 5,610 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.7 | 20 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,040 | 5,040 | 0.07 | 0.19 | 0.43 | 5,098 |
| Vendor | 0.21 | 8.2 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,342 | 7,342 | 0.31 | 1.0 | 0.50 | 7,652 |
| Hauling | 0.08 | 6.6 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,336 | 5,336 | 0.26 | 0.87 | 0.29 | 5,602 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.99 | 1.2 | 15 | 0.00 | 0.00 | 3.7 | 3.7 | 0.00 | 0.86 | 0.86 | — | 3,623 | 3,623 | 0.05 | 0.13 | 5.1 | 3,669 |
| Vendor | 0.16 | 5.9 | 2.7 | 0.04 | 0.04 | 1.4 | 1.5 | 0.04 | 0.40 | 0.44 | — | 5,199 | 5,199 | 0.22 | 0.72 | 5.8 | 5,425 |
| Hauling | 0.06 | 4.7 | 1.8 | 0.03 | 0.05 | 1.0 | 1.1 | 0.05 | 0.29 | 0.34 | — | 3,779 | 3,779 | 0.19 | 0.61 | 3.5 | 3,971 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.18 | 0.22 | 2.8 | 0.00 | 0.00 | 0.67 | 0.67 | 0.00 | 0.16 | 0.16 | — | 600 | 600 | 0.01 | 0.02 | 0.84 | 607 |
| Vendor | 0.03 | 1.1 | 0.49 | 0.01 | 0.01 | 0.26 | 0.27 | 0.01 | 0.07 | 0.08 | — | 861 | 861 | 0.04 | 0.12 | 0.97 | 898 |
| Hauling | 0.01 | 0.86 | 0.33 | < 0.005 | 0.01 | 0.19 | 0.20 | 0.01 | 0.05 | 0.06 | — | 626 | 626 | 0.03 | 0.10 | 0.58 | 657 |

## 3.10. Building Construction (2027) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | 0.01 | 5.2 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | — | 1.2 | 1.1 | — | 1.1 | — | 8,224 | 8,224 | 0.33 | 0.07 | — | 8,252 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.9 | 4.9 | < 0.005 | < 0.005 | < 0.005 | 5.2 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.1 | 27 | 30 | 0.06 | 0.86 | — | 0.86 | 0.79 | — | 0.79 | — | 5,826 | 5,826 | 0.24 | 0.05 | — | 5,846 |
| Dust From Material Movement | — | — | — | — | — | 0.29 | 0.29 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 3.5 | 3.5 | < 0.005 | < 0.005 | < 0.005 | 3.7 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.57 | 4.9 | 5.5 | 0.01 | 0.16 | — | 0.16 | 0.14 | — | 0.14 | — | 965 | 965 | 0.04 | 0.01 | — | 968 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.58 | 0.58 | < 0.005 | < 0.005 | < 0.005 | 0.61 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 24 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,316 | 5,316 | 0.22 | 0.19 | 17 | 5,394 |
| Vendor | 0.22 | 7.9 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,338 | 7,338 | 0.31 | 1.0 | 19 | 7,667 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.3 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,334 | 5,334 | 0.26 | 0.87 | 11 | 5,610 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.7 | 20 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,040 | 5,040 | 0.07 | 0.19 | 0.43 | 5,098 |
| Vendor | 0.21 | 8.2 | 3.8 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,342 | 7,342 | 0.31 | 1.0 | 0.50 | 7,652 |
| Hauling | 0.08 | 6.6 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,336 | 5,336 | 0.26 | 0.87 | 0.29 | 5,602 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.99 | 1.2 | 15 | 0.00 | 0.00 | 3.7 | 3.7 | 0.00 | 0.86 | 0.86 | — | 3,623 | 3,623 | 0.05 | 0.13 | 5.1 | 3,669 |
| Vendor | 0.16 | 5.9 | 2.7 | 0.04 | 0.04 | 1.4 | 1.5 | 0.04 | 0.40 | 0.44 | — | 5,199 | 5,199 | 0.22 | 0.72 | 5.8 | 5,425 |
| Hauling | 0.06 | 4.7 | 1.8 | 0.03 | 0.05 | 1.0 | 1.1 | 0.05 | 0.29 | 0.34 | — | 3,779 | 3,779 | 0.19 | 0.61 | 3.5 | 3,971 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.18 | 0.22 | 2.8 | 0.00 | 0.00 | 0.67 | 0.67 | 0.00 | 0.16 | 0.16 | — | 600 | 600 | 0.01 | 0.02 | 0.84 | 607 |
| Vendor | 0.03 | 1.1 | 0.49 | 0.01 | 0.01 | 0.26 | 0.27 | 0.01 | 0.07 | 0.08 | — | 861 | 861 | 0.04 | 0.12 | 0.97 | 898 |
| Hauling | 0.01 | 0.86 | 0.33 | < 0.005 | 0.01 | 0.19 | 0.20 | 0.01 | 0.05 | 0.06 | — | 626 | 626 | 0.03 | 0.10 | 0.58 | 657 |

## 3.11. Building Construction (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.0 | 8.9 | 10 | 0.02 | 0.27 | — | 0.27 | 0.25 | — | 0.25 | — | 2,028 | 2,028 | 0.08 | 0.02 | — | 2,035 |
| Dust From Material Movement | — | — | — | — | — | 0.10 | 0.10 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.01 | 0.01 | — | 1.2 | 1.2 | < 0.005 | < 0.005 | < 0.005 | 1.3 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19 | 1.6 | 1.9 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 336 | 336 | 0.01 | < 0.005 | — | 337 |
| Dust From Material Movement | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.20 | 0.20 | < 0.005 | < 0.005 | < 0.005 | 0.21 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 23 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,221 | 5,221 | 0.05 | 0.19 | 15 | 5,293 |
| Vendor | 0.17 | 7.5 | 3.6 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,167 | 7,167 | 0.26 | 1.0 | 18 | 7,492 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.1 | 2.4 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,214 | 5,214 | 0.26 | 0.83 | 11 | 5,479 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.6 | 19 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 4,950 | 4,950 | 0.06 | 0.19 | 0.38 | 5,008 |
| Vendor | 0.16 | 7.9 | 3.7 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,171 | 7,171 | 0.26 | 1.0 | 0.47 | 7,480 |
| Hauling | 0.08 | 6.4 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,216 | 5,216 | 0.26 | 0.83 | 0.27 | 5,471 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.33 | 0.38 | 4.9 | 0.00 | 0.00 | 1.3 | 1.3 | 0.00 | 0.30 | 0.30 | — | 1,239 | 1,239 | 0.02 | 0.05 | 1.6 | 1,254 |
| Vendor | 0.04 | 1.9 | 0.89 | 0.01 | 0.01 | 0.50 | 0.51 | 0.01 | 0.14 | 0.15 | — | 1,768 | 1,768 | 0.06 | 0.25 | 1.9 | 1,846 |
| Hauling | 0.02 | 1.6 | 0.60 | 0.01 | 0.02 | 0.36 | 0.38 | 0.02 | 0.10 | 0.12 | — | 1,286 | 1,286 | 0.07 | 0.21 | 1.1 | 1,350 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.07 | 0.90 | 0.00 | 0.00 | 0.23 | 0.23 | 0.00 | 0.05 | 0.05 | — | 205 | 205 | < 0.005 | 0.01 | 0.26 | 208 |
| Vendor | 0.01 | 0.36 | 0.16 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.03 | 0.03 | — | 293 | 293 | 0.01 | 0.04 | 0.32 | 306 |
| Hauling | < 0.005 | 0.29 | 0.11 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 213 | 213 | 0.01 | 0.03 | 0.19 | 223 |

## 3.12. Building Construction (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.2 | 36 | 42 | 0.09 | 1.1 | — | 1.1 | 1.0 | — | 1.0 | — | 8,226 | 8,226 | 0.33 | 0.07 | — | 8,255 |
| Dust From Material Movement | — | — | — | — | — | 0.41 | 0.41 | — | 0.04 | 0.04 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.28 | 0.28 | < 0.005 | 0.03 | 0.03 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.0 | 8.9 | 10 | 0.02 | 0.27 | — | 0.27 | 0.25 | — | 0.25 | — | 2,028 | 2,028 | 0.08 | 0.02 | — | 2,035 |
| Dust From Material Movement | — | — | — | — | — | 0.10 | 0.10 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.01 | 0.01 | — | 1.2 | 1.2 | < 0.005 | < 0.005 | < 0.005 | 1.3 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.19 | 1.6 | 1.9 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 336 | 336 | 0.01 | < 0.005 | — | 337 |
| Dust From Material Movement | — | — | — | — | — | 0.02 | 0.02 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.20 | 0.20 | < 0.005 | < 0.005 | < 0.005 | 0.21 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.4 | 23 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 5,221 | 5,221 | 0.05 | 0.19 | 15 | 5,293 |
| Vendor | 0.17 | 7.5 | 3.6 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,167 | 7,167 | 0.26 | 1.0 | 18 | 7,492 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.09 | 6.1 | 2.4 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,214 | 5,214 | 0.26 | 0.83 | 11 | 5,479 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.4 | 1.6 | 19 | 0.00 | 0.00 | 5.2 | 5.2 | 0.00 | 1.2 | 1.2 | — | 4,950 | 4,950 | 0.06 | 0.19 | 0.38 | 5,008 |
| Vendor | 0.16 | 7.9 | 3.7 | 0.05 | 0.05 | 2.1 | 2.1 | 0.05 | 0.57 | 0.62 | — | 7,171 | 7,171 | 0.26 | 1.0 | 0.47 | 7,480 |
| Hauling | 0.08 | 6.4 | 2.5 | 0.04 | 0.07 | 1.5 | 1.6 | 0.07 | 0.41 | 0.48 | — | 5,216 | 5,216 | 0.26 | 0.83 | 0.27 | 5,471 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.33 | 0.38 | 4.9 | 0.00 | 0.00 | 1.3 | 1.3 | 0.00 | 0.30 | 0.30 | — | 1,239 | 1,239 | 0.02 | 0.05 | 1.6 | 1,254 |
| Vendor | 0.04 | 1.9 | 0.89 | 0.01 | 0.01 | 0.50 | 0.51 | 0.01 | 0.14 | 0.15 | — | 1,768 | 1,768 | 0.06 | 0.25 | 1.9 | 1,846 |
| Hauling | 0.02 | 1.6 | 0.60 | 0.01 | 0.02 | 0.36 | 0.38 | 0.02 | 0.10 | 0.12 | — | 1,286 | 1,286 | 0.07 | 0.21 | 1.1 | 1,350 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.07 | 0.90 | 0.00 | 0.00 | 0.23 | 0.23 | 0.00 | 0.05 | 0.05 | — | 205 | 205 | < 0.005 | 0.01 | 0.26 | 208 |
| Vendor | 0.01 | 0.36 | 0.16 | < 0.005 | < 0.005 | 0.09 | 0.09 | < 0.005 | 0.03 | 0.03 | — | 293 | 293 | 0.01 | 0.04 | 0.32 | 306 |
| Hauling | < 0.005 | 0.29 | 0.11 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 213 | 213 | 0.01 | 0.03 | 0.19 | 223 |

## 3.13. Paving (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36 | 3.0 | 4.0 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 978 | 978 | 0.04 | 0.01 | — | 982 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Paving | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.86 | 0.86 | < 0.005 | < 0.005 | < 0.005 | 0.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.55 | 0.73 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 162 | 162 | 0.01 | < 0.005 | — | 163 |
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Paving | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.14 | 0.14 | < 0.005 | < 0.005 | < 0.005 | 0.15 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,194 | 1,194 | 0.04 | 0.17 | 3.0 | 1,249 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,195 | 1,195 | 0.04 | 0.17 | 0.08 | 1,247 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.11 | 1.4 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 358 | 358 | < 0.005 | 0.01 | 0.46 | 362 |
| Vendor | < 0.005 | 0.23 | 0.11 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.02 | 0.02 | — | 213 | 213 | 0.01 | 0.03 | 0.23 | 222 |
| Hauling | < 0.005 | 0.11 | 0.04 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 93 | 93 | < 0.005 | 0.01 | 0.08 | 97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.26 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 59 | 59 | < 0.005 | < 0.005 | 0.08 | 60 |
| Vendor | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 35 | 35 | < 0.005 | < 0.005 | 0.04 | 37 |
| Hauling | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.01 | 16 |

## 3.14. Paving (2028) - Mitigated

### Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.1 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.0 | 17 | 23 | 0.05 | 0.59 | — | 0.59 | 0.55 | — | 0.55 | — | 5,493 | 5,493 | 0.22 | 0.04 | — | 5,512 |
| Dust From Material Movement | — | — | — | — | — | 0.28 | 0.28 | — | 0.03 | 0.03 | — | — | — | — | — | — | — |
| Paving | 0.03 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | 0.19 | 0.19 | < 0.005 | 0.02 | 0.02 | — | 4.8 | 4.8 | < 0.005 | < 0.005 | < 0.005 | 5.1 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.36 | 3.0 | 4.0 | 0.01 | 0.11 | — | 0.11 | 0.10 | — | 0.10 | — | 978 | 978 | 0.04 | 0.01 | — | 982 |
| Dust From Material Movement | — | — | — | — | — | 0.05 | 0.05 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Paving | 0.01 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | < 0.005 | < 0.005 | — | 0.86 | 0.86 | < 0.005 | < 0.005 | < 0.005 | 0.90 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.07 | 0.55 | 0.73 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 162 | 162 | 0.01 | < 0.005 | — | 163 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movement | — | — | — | — | — | 0.01 | 0.01 | — | < 0.005 | < 0.005 | — | — | — | — | — | — | — |
| Paving | < 0.005 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | < 0.005 | < 0.005 | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 0.14 | 0.14 | < 0.005 | < 0.005 | < 0.005 | 0.15 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,194 | 1,194 | 0.04 | 0.17 | 3.0 | 1,249 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.01 | 0.34 | 0.35 | 0.01 | 0.09 | 0.10 | — | 1,195 | 1,195 | 0.04 | 0.17 | 0.08 | 1,247 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.10 | 0.11 | 1.4 | 0.00 | 0.00 | 0.37 | 0.37 | 0.00 | 0.09 | 0.09 | — | 358 | 358 | < 0.005 | 0.01 | 0.46 | 362 |
| Vendor | < 0.005 | 0.23 | 0.11 | < 0.005 | < 0.005 | 0.06 | 0.06 | < 0.005 | 0.02 | 0.02 | — | 213 | 213 | 0.01 | 0.03 | 0.23 | 222 |
| Hauling | < 0.005 | 0.11 | 0.04 | < 0.005 | < 0.005 | 0.03 | 0.03 | < 0.005 | 0.01 | 0.01 | — | 93 | 93 | < 0.005 | 0.01 | 0.08 | 97 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.02 | 0.26 | 0.00 | 0.00 | 0.07 | 0.07 | 0.00 | 0.02 | 0.02 | — | 59 | 59 | < 0.005 | < 0.005 | 0.08 | 60 |
| Vendor | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 35 | 35 | < 0.005 | < 0.005 | 0.04 | 37 |
| Hauling | < 0.005 | 0.02 | 0.01 | < 0.005 | < 0.005 | < 0.005 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 15 | 15 | < 0.005 | < 0.005 | 0.01 | 16 |

## 3.15. Architectural Coating (2028) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 58 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 58 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26 | 2.8 | 4.0 | 0.01 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 648 | 648 | 0.03 | 0.01 | — | 650 |
| Architectural Coatings | 21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.51 | 0.74 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 107 | 107 | < 0.005 | < 0.005 | — | 108 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | 3.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.06 | 2.5 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,389 | 2,389 | 0.09 | 0.34 | 6.0 | 2,497 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.05 | 2.6 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,390 | 2,390 | 0.09 | 0.34 | 0.16 | 2,493 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.22 | 2.9 | 0.00 | 0.00 | 0.74 | 0.74 | 0.00 | 0.17 | 0.17 | — | 716 | 716 | 0.01 | 0.03 | 0.92 | 725 |
| Vendor | 0.02 | 0.94 | 0.43 | 0.01 | 0.01 | 0.24 | 0.25 | 0.01 | 0.07 | 0.07 | — | 851 | 851 | 0.03 | 0.12 | 0.93 | 889 |
| Hauling | < 0.005 | 0.23 | 0.09 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 186 | 186 | 0.01 | 0.03 | 0.16 | 195 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.52 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 118 | 118 | < 0.005 | < 0.005 | 0.15 | 120 |
| Vendor | < 0.005 | 0.17 | 0.08 | < 0.005 | < 0.005 | 0.04 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 141 | 141 | 0.01 | 0.02 | 0.15 | 147 |
| Hauling | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 31 | 31 | < 0.005 | < 0.005 | 0.03 | 32 |

## 3.16. Architectural Coating (2028) - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Location | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 58 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | — | 0.17 | 0.16 | — | 0.16 | — | 1,820 | 1,820 | 0.07 | 0.01 | — | 1,826 |
| Architectural Coatings | 58 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.26 | 2.8 | 4.0 | 0.01 | 0.06 | — | 0.06 | 0.06 | — | 0.06 | — | 648 | 648 | 0.03 | 0.01 | — | 650 |
| Architectural Coatings | 21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.05 | 0.51 | 0.74 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 107 | 107 | < 0.005 | < 0.005 | — | 108 |
| Architectural Coatings | 3.8 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.55 | 0.54 | 9.0 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 2,088 | 2,088 | 0.02 | 0.08 | 6.0 | 2,117 |
| Vendor | 0.06 | 2.5 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,389 | 2,389 | 0.09 | 0.34 | 6.0 | 2,497 |
| Hauling | 0.01 | 0.61 | 0.24 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 521 | 521 | 0.03 | 0.08 | 1.1 | 548 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.54 | 0.62 | 7.7 | 0.00 | 0.00 | 2.1 | 2.1 | 0.00 | 0.49 | 0.49 | — | 1,980 | 1,980 | 0.02 | 0.08 | 0.15 | 2,003 |
| Vendor | 0.05 | 2.6 | 1.2 | 0.02 | 0.02 | 0.68 | 0.70 | 0.02 | 0.19 | 0.21 | — | 2,390 | 2,390 | 0.09 | 0.34 | 0.16 | 2,493 |
| Hauling | 0.01 | 0.64 | 0.25 | < 0.005 | 0.01 | 0.15 | 0.16 | 0.01 | 0.04 | 0.05 | — | 522 | 522 | 0.03 | 0.08 | 0.03 | 547 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.19 | 0.22 | 2.9 | 0.00 | 0.00 | 0.74 | 0.74 | 0.00 | 0.17 | 0.17 | — | 716 | 716 | 0.01 | 0.03 | 0.92 | 725 |
| Vendor | 0.02 | 0.94 | 0.43 | 0.01 | 0.01 | 0.24 | 0.25 | 0.01 | 0.07 | 0.07 | — | 851 | 851 | 0.03 | 0.12 | 0.93 | 889 |
| Hauling | < 0.005 | 0.23 | 0.09 | < 0.005 | < 0.005 | 0.05 | 0.05 | < 0.005 | 0.01 | 0.02 | — | 186 | 186 | 0.01 | 0.03 | 0.16 | 195 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.04 | 0.04 | 0.52 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 118 | 118 | < 0.005 | < 0.005 | 0.15 | 120 |
| Vendor | < 0.005 | 0.17 | 0.08 | < 0.005 | < 0.005 | 0.04 | 0.05 | < 0.005 | 0.01 | 0.01 | — | 141 | 141 | 0.01 | 0.02 | 0.15 | 147 |
| Hauling | < 0.005 | 0.04 | 0.02 | < 0.005 | < 0.005 | 0.01 | 0.01 | < 0.005 | < 0.005 | < 0.005 | — | 31 | 31 | < 0.005 | < 0.005 | 0.03 | 32 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,342 | 4,342 | 0.55 | 0.07 | — | 4,375 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 850 | 850 | 0.11 | 0.01 | — | 856 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 990 | 990 | 0.13 | 0.02 | — | 997 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 1,651 | 1,651 | 0.21 | 0.03 | — | 1,664 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 604 | 604 | 0.08 | 0.01 | — | 609 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 912 | 912 | 0.12 | 0.01 | — | 919 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 367 | 367 | 0.05 | 0.01 | — | 370 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 206 | 206 | 0.03 | < 0.005 | — | 207 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | 343 | 343 | 0.04 | 0.01 | — | 345 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10,264 | 10,264 | 1.3 | 0.16 | — | 10,343 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,342 | 4,342 | 0.55 | 0.07 | — | 4,375 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 850 | 850 | 0.11 | 0.01 | — | 856 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 990 | 990 | 0.13 | 0.02 | — | 997 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 1,651 | 1,651 | 0.21 | 0.03 | — | 1,664 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 604 | 604 | 0.08 | 0.01 | — | 609 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 912 | 912 | 0.12 | 0.01 | — | 919 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 367 | 367 | 0.05 | 0.01 | — | 370 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 206 | 206 | 0.03 | < 0.005 | — | 207 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | 343 | 343 | 0.04 | 0.01 | — | 345 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10,264 | 10,264 | 1.3 | 0.16 | — | 10,343 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 719 | 719 | 0.09 | 0.01 | — | 724 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 141 | 141 | 0.02 | < 0.005 | — | 142 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 164 | 164 | 0.02 | < 0.005 | — | 165 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 273 | 273 | 0.03 | < 0.005 | — | 275 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 100 | 100 | 0.01 | < 0.005 | — | 101 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 151 | 151 | 0.02 | < 0.005 | — | 152 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartment Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 61 | 61 | 0.01 | < 0.005 | — | 61 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 34 | 34 | < 0.005 | < 0.005 | — | 34 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 | 0.01 | < 0.005 | — | 57 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,699 | 1,699 | 0.22 | 0.03 | — | 1,712 |

### 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,339 | 4,339 | 0.55 | 0.07 | — | 4,373 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 847 | 847 | 0.11 | 0.01 | — | 854 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 848 | 848 | 0.11 | 0.01 | — | 854 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 1,651 | 1,651 | 0.21 | 0.03 | — | 1,664 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unenclosed | — | — | — | — | — | — | — | — | — | — | — | 604 | 604 | 0.08 | 0.01 | — | 609 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 900 | 900 | 0.11 | 0.01 | — | 907 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 347 | 347 | 0.04 | 0.01 | — | 349 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 205 | 205 | 0.03 | < 0.005 | — | 207 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | 343 | 343 | 0.04 | 0.01 | — | 345 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10,084 | 10,084 | 1.3 | 0.15 | — | 10,162 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 4,339 | 4,339 | 0.55 | 0.07 | — | 4,373 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 847 | 847 | 0.11 | 0.01 | — | 854 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 848 | 848 | 0.11 | 0.01 | — | 854 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 1,651 | 1,651 | 0.21 | 0.03 | — | 1,664 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unenclosed | — | — | — | — | — | — | — | — | — | — | — | 604 | 604 | 0.08 | 0.01 | — | 609 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 900 | 900 | 0.11 | 0.01 | — | 907 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 347 | 347 | 0.04 | 0.01 | — | 349 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 205 | 205 | 0.03 | < 0.005 | — | 207 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | 343 | 343 | 0.04 | 0.01 | — | 345 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 10,084 | 10,084 | 1.3 | 0.15 | — | 10,162 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 718 | 718 | 0.09 | 0.01 | — | 724 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | 140 | 140 | 0.02 | < 0.005 | — | 141 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | 140 | 140 | 0.02 | < 0.005 | — | 141 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 273 | 273 | 0.03 | < 0.005 | — | 275 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | — | 100 | 100 | 0.01 | < 0.005 | — | 101 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | 149 | 149 | 0.02 | < 0.005 | — | 150 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 | 0.01 | < 0.005 | — | 58 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | — | 34 | 34 | < 0.005 | < 0.005 | — | 34 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | 57 | 57 | 0.01 | < 0.005 | — | 57 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 1,670 | 1,670 | 0.21 | 0.03 | — | 1,682 |

### 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | 0.07 | 1.2 | 1.0 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 1,476 | 1,476 | 0.13 | < 0.005 | — | 1,480 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | 0.01 | 0.21 | 0.18 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 249 | 249 | 0.02 | < 0.005 | — | 250 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 498 | 498 | 0.04 | < 0.005 | — | 500 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.34 | 0.29 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 412 | 412 | 0.04 | < 0.005 | — | 413 |
| Movie Theater (No Matinee) | 0.03 | 0.57 | 0.48 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 686 | 686 | 0.06 | < 0.005 | — | 688 |
| Total | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 7,792 | 7,792 | 0.69 | 0.01 | — | 7,814 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.07 | 1.2 | 1.0 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 1,476 | 1,476 | 0.13 | < 0.005 | — | 1,480 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | 0.01 | 0.21 | 0.18 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 249 | 249 | 0.02 | < 0.005 | — | 250 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 498 | 498 | 0.04 | < 0.005 | — | 500 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.34 | 0.29 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 412 | 412 | 0.04 | < 0.005 | — | 413 |
| Movie Theater (No Matinee) | 0.03 | 0.57 | 0.48 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 686 | 686 | 0.06 | < 0.005 | — | 688 |
| Total | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 7,792 | 7,792 | 0.69 | 0.01 | — | 7,814 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.42 | 0.36 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 459 | 459 | 0.04 | < 0.005 | — | 460 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arena | 0.01 | 0.26 | 0.22 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 282 | 282 | 0.02 | < 0.005 | — | 282 |
| High Turnover (Sit Down Restaurant) | 0.01 | 0.23 | 0.19 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 244 | 244 | 0.02 | < 0.005 | — | 245 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 41 | 41 | < 0.005 | < 0.005 | — | 41 |
| Apartments Mid Rise | < 0.005 | 0.07 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 83 | 83 | 0.01 | < 0.005 | — | 83 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 68 | 68 | 0.01 | < 0.005 | — | 68 |
| Movie Theater (No Matinee) | 0.01 | 0.10 | 0.09 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 114 | 114 | 0.01 | < 0.005 | — | 114 |
| Total | 0.07 | 1.2 | 0.97 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 1,290 | 1,290 | 0.11 | < 0.005 | — | 1,294 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.07 | 1.2 | 1.0 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 1,476 | 1,476 | 0.13 | < 0.005 | — | 1,480 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | 0.01 | 0.21 | 0.18 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 249 | 249 | 0.02 | < 0.005 | — | 250 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 495 | 495 | 0.04 | < 0.005 | — | 496 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | 0.02 | 0.34 | 0.29 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 412 | 412 | 0.04 | < 0.005 | — | 413 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movie Theater (No Matinee) | 0.03 | 0.57 | 0.48 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 686 | 686 | 0.06 | < 0.005 | — | 688 |
| Total | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 7,789 | 7,789 | 0.69 | 0.01 | — | 7,810 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.13 | 2.3 | 2.0 | 0.01 | 0.18 | — | 0.18 | 0.18 | — | 0.18 | — | 2,770 | 2,770 | 0.25 | 0.01 | — | 2,778 |
| Arena | 0.08 | 1.4 | 1.2 | 0.01 | 0.11 | — | 0.11 | 0.11 | — | 0.11 | — | 1,701 | 1,701 | 0.15 | < 0.005 | — | 1,706 |
| High Turnover (Sit Down Restaurant) | 0.07 | 1.2 | 1.0 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 1,476 | 1,476 | 0.13 | < 0.005 | — | 1,480 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | 0.01 | 0.21 | 0.18 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 249 | 249 | 0.02 | < 0.005 | — | 250 |
| Apartments Mid Rise | 0.02 | 0.39 | 0.17 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 495 | 495 | 0.04 | < 0.005 | — | 496 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | 0.02 | 0.34 | 0.29 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 412 | 412 | 0.04 | < 0.005 | — | 413 |
| Movie Theater (No Matinee) | 0.03 | 0.57 | 0.48 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 686 | 686 | 0.06 | < 0.005 | — | 688 |
| Total | 0.36 | 6.5 | 5.3 | 0.04 | 0.50 | — | 0.50 | 0.50 | — | 0.50 | — | 7,789 | 7,789 | 0.69 | 0.01 | — | 7,810 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.02 | 0.42 | 0.36 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 459 | 459 | 0.04 | < 0.005 | — | 460 |
| Arena | 0.01 | 0.26 | 0.22 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 282 | 282 | 0.02 | < 0.005 | — | 282 |
| High Turnover (Sit Down Restaurant) | 0.01 | 0.23 | 0.19 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 244 | 244 | 0.02 | < 0.005 | — | 245 |
| Enclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | < 0.005 | 0.04 | 0.03 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 41 | 41 | < 0.005 | < 0.005 | — | 41 |
| Apartments Mid Rise | < 0.005 | 0.07 | 0.03 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 82 | 82 | 0.01 | < 0.005 | — | 82 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | < 0.005 | 0.06 | 0.05 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 68 | 68 | 0.01 | < 0.005 | — | 68 |
| Movie Theater (No Matinee) | 0.01 | 0.10 | 0.09 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 114 | 114 | 0.01 | < 0.005 | — | 114 |
| Total | 0.07 | 1.2 | 0.97 | 0.01 | 0.09 | — | 0.09 | 0.09 | — | 0.09 | — | 1,289 | 1,289 | 0.11 | < 0.005 | — | 1,293 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 18 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.0 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 12 | 0.67 | 79 | < 0.005 | 0.13 | — | 0.13 | 0.10 | — | 0.10 | — | 315 | 315 | 0.01 | < 0.005 | — | 316 |
| Total | 32 | 0.67 | 79 | < 0.005 | 0.13 | — | 0.13 | 0.10 | — | 0.10 | — | 315 | 315 | 0.01 | < 0.005 | — | 316 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 18 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.0 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.6 | 0.08 | 9.9 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | — | 36 |
| Total | 5.1 | 0.08 | 9.9 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | — | 36 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 18 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.0 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 12 | 0.67 | 79 | < 0.005 | 0.13 | — | 0.13 | 0.10 | — | 0.10 | — | 315 | 315 | 0.01 | < 0.005 | — | 316 |
| Total | 32 | 0.67 | 79 | < 0.005 | 0.13 | — | 0.13 | 0.10 | — | 0.10 | — | 315 | 315 | 0.01 | < 0.005 | — | 316 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Consumer | 18 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 1.0 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.19 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.6 | 0.08 | 9.9 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | — | 36 |
| Total | 5.1 | 0.08 | 9.9 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | — | 36 | 36 | < 0.005 | < 0.005 | — | 36 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 51 | 138 | 189 | 5.2 | 0.13 | — | 358 |
| Arena | — | — | — | — | — | — | — | — | — | — | 11 | 31 | 42 | 1.1 | 0.03 | — | 78 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 17 | 44 | 62 | 1.8 | 0.04 | — | 119 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 69 | 176 | 246 | 7.1 | 0.17 | — | 475 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 18 | 45 | 63 | 1.8 | 0.04 | — | 122 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 38 | 98 | 136 | 4.0 | 0.10 | — | 263 |
| Total | — | — | — | — | — | — | — | — | — | — | 211 | 549 | 760 | 22 | 0.52 | — | 1,457 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 51 | 138 | 189 | 5.2 | 0.13 | — | 358 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arena | — | — | — | — | — | — | — | — | — | — | 11 | 31 | 42 | 1.1 | 0.03 | — | 78 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 17 | 44 | 62 | 1.8 | 0.04 | — | 119 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 69 | 176 | 246 | 7.1 | 0.17 | — | 475 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 18 | 45 | 63 | 1.8 | 0.04 | — | 122 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 38 | 98 | 136 | 4.0 | 0.10 | — | 263 |
| Total | — | — | — | — | — | — | — | — | — | — | 211 | 549 | 760 | 22 | 0.52 | — | 1,457 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 8.4 | 23 | 31 | 0.87 | 0.02 | — | 59 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 5.2 | 7.0 | 0.18 | < 0.005 | — | 13 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 2.9 | 7.3 | 10 | 0.30 | 0.01 | — | 20 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 11 | 29 | 41 | 1.2 | 0.03 | — | 79 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 2.9 | 7.5 | 10 | 0.30 | 0.01 | — | 20 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 1.0 | 2.6 | 3.6 | 0.10 | < 0.005 | — | 6.9 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 6.4 | 16 | 23 | 0.66 | 0.02 | — | 44 |
| Total | — | — | — | — | — | — | — | — | — | — | 35 | 91 | 126 | 3.6 | 0.09 | — | 241 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 47 | 127 | 174 | 4.8 | 0.12 | — | 328 |
| Arena | — | — | — | — | — | — | — | — | — | — | 9.9 | 29 | 39 | 1.0 | 0.02 | — | 71 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 16 | 41 | 57 | 1.6 | 0.04 | — | 110 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 61 | 156 | 217 | 6.3 | 0.15 | — | 419 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 15 | 39 | 54 | 1.5 | 0.04 | — | 103 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 38 | 98 | 136 | 4.0 | 0.10 | — | 263 |
| Total | — | — | — | — | — | — | — | — | — | — | 193 | 504 | 697 | 20 | 0.48 | — | 1,337 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 47 | 127 | 174 | 4.8 | 0.12 | — | 328 |
| Arena | — | — | — | — | — | — | — | — | — | — | 9.9 | 29 | 39 | 1.0 | 0.02 | — | 71 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 16 | 41 | 57 | 1.6 | 0.04 | — | 110 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 61 | 156 | 217 | 6.3 | 0.15 | — | 419 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 15 | 39 | 54 | 1.5 | 0.04 | — | 103 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | — | — | — | — | — | — | — | — | — | — | 6.1 | 16 | 22 | 0.63 | 0.02 | — | 42 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 38 | 98 | 136 | 4.0 | 0.10 | — | 263 |
| Total | — | — | — | — | — | — | — | — | — | — | 193 | 504 | 697 | 20 | 0.48 | — | 1,337 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 7.7 | 21 | 29 | 0.79 | 0.02 | — | 54 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.6 | 4.8 | 6.4 | 0.17 | < 0.005 | — | 12 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 2.7 | 6.7 | 9.4 | 0.27 | 0.01 | — | 18 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 10 | 26 | 36 | 1.0 | 0.03 | — | 69 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 2.5 | 6.4 | 8.9 | 0.26 | 0.01 | — | 17 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | — | — | — | — | — | — | — | — | — | — | 1.0 | 2.6 | 3.6 | 0.10 | < 0.005 | — | 6.9 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 6.4 | 16 | 23 | 0.66 | 0.02 | — | 44 |
| Total | — | — | — | — | — | — | — | — | — | — | 32 | 83 | 115 | 3.3 | 0.08 | — | 221 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 257 | 0.00 | 257 | 26 | 0.00 | — | 898 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 74 | 0.00 | 74 | 7.4 | 0.00 | — | 257 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 15 | 0.00 | 15 | 1.5 | 0.00 | — | 52 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 154 | 0.00 | 154 | 15 | 0.00 | — | 537 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 257 | 0.00 | 257 | 26 | 0.00 | — | 898 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

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| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 74 | 0.00 | 74 | 7.4 | 0.00 | — | 257 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 15 | 0.00 | 15 | 1.5 | 0.00 | — | 52 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 154 | 0.00 | 154 | 15 | 0.00 | — | 537 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 173 | 0.00 | 173 | 17 | 0.00 | — | 607 |
| Arena | — | — | — | — | — | — | — | — | — | — | 0.30 | 0.00 | 0.30 | 0.03 | 0.00 | — | 1.1 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 42 | 0.00 | 42 | 4.2 | 0.00 | — | 149 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

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| Unenclo Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 12 | 0.00 | 12 | 1.2 | 0.00 | — | 43 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 6.7 | 0.00 | 6.7 | 0.67 | 0.00 | — | 23 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 2.5 | 0.00 | 2.5 | 0.25 | 0.00 | — | 8.6 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 25 | 0.00 | 25 | 2.5 | 0.00 | — | 89 |
| Total | — | — | — | — | — | — | — | — | — | — | 263 | 0.00 | 263 | 26 | 0.00 | — | 920 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 257 | 0.00 | 257 | 26 | 0.00 | — | 898 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 74 | 0.00 | 74 | 7.4 | 0.00 | — | 257 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 15 | 0.00 | 15 | 1.5 | 0.00 | — | 52 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 154 | 0.00 | 154 | 15 | 0.00 | — | 537 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 1,048 | 0.00 | 1,048 | 105 | 0.00 | — | 3,665 |
| Arena | — | — | — | — | — | — | — | — | — | — | 1.8 | 0.00 | 1.8 | 0.18 | 0.00 | — | 6.4 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 257 | 0.00 | 257 | 26 | 0.00 | — | 898 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 74 | 0.00 | 74 | 7.4 | 0.00 | — | 257 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 40 | 0.00 | 40 | 4.0 | 0.00 | — | 141 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 15 | 0.00 | 15 | 1.5 | 0.00 | — | 52 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 154 | 0.00 | 154 | 15 | 0.00 | — | 537 |
| Total | — | — | — | — | — | — | — | — | — | — | 1,588 | 0.00 | 1,588 | 159 | 0.00 | — | 5,557 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | 173 | 0.00 | 173 | 17 | 0.00 | — | 607 |
| Arena | — | — | — | — | — | — | — | — | — | — | 0.30 | 0.00 | 0.30 | 0.03 | 0.00 | — | 1.1 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | 42 | 0.00 | 42 | 4.2 | 0.00 | — | 149 |
| Enclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Unenclosed Parking with Elevator | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | 12 | 0.00 | 12 | 1.2 | 0.00 | — | 43 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | 6.7 | 0.00 | 6.7 | 0.67 | 0.00 | — | 23 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Non-Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Library | — | — | — | — | — | — | — | — | — | — | 2.5 | 0.00 | 2.5 | 0.25 | 0.00 | — | 8.6 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | 25 | 0.00 | 25 | 2.5 | 0.00 | — | 89 |
| Total | — | — | — | — | — | — | — | — | — | — | 263 | 0.00 | 263 | 26 | 0.00 | — | 920 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 63 | 63 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.62 | 0.62 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.12 | 0.12 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.31 | 0.31 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 63 | 63 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.62 | 0.62 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.12 | 0.12 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.31 | 0.31 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.14 | 0.14 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.13 | 0.13 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 10 | 10 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.16 | 0.16 |

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|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 11 | 11 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 63 | 63 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.62 | 0.62 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.12 | 0.12 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.31 | 0.31 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.83 | 0.83 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.77 | 0.77 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 63 | 63 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.62 | 0.62 |
| Apartments Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.96 | 0.96 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.12 | 0.12 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.31 | 0.31 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 66 | 66 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.14 | 0.14 |
| Arena | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.13 | 0.13 |
| High Turnover (Sit Down Restaurant) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 10 | 10 |
| Regional Shopping Center | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.10 | 0.10 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Apartment Mid Rise | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.16 | 0.16 |
| Library | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.02 | 0.02 |
| Movie Theater (No Matinee) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.05 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 11 | 11 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Total | 0.27 | 2.5 | 6.1 | 0.01 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 915 | 915 | 0.04 | 0.01 | — | 918 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Forklifts | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |
| Total | 0.04 | 0.33 | 0.80 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 108 | 108 | < 0.005 | < 0.005 | — | 108 |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.1. Construction Schedule

| Phase Name | Phase Type | Start Date | End Date | Days Per Week | Work Days per Phase | Phase Description |
|---|---|---|---|---|---|---|
| Demolition | Demolition | 6/1/2026 | 8/28/2026 | 5.0 | 65 | Reno/Road Demo |
| Site Preparation | Site Preparation | 8/3/2026 | 10/30/2026 | 5.0 | 65 | Site Prep & Utilities |
| Grading | Grading | 10/5/2026 | 4/2/2027 | 5.0 | 130 | Grading & Excavation |
| Building Construction | Building Construction | 1/4/2027 | 5/5/2028 | 5.0 | 350 | Buildings Construction |
| Paving | Paving | 3/6/2028 | 6/2/2028 | 5.0 | 65 | Hardscape/Road/Landscaping |
| Architectural Coating | Architectural Coating | 1/3/2028 | 6/30/2028 | 5.0 | 130 | Painting/Signage/Landscaping |

## 5.2. Off-Road Equipment

### 5.2.1. Unmitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Demolition | Concrete/Industrial Saws | Diesel | Average | 2.0 | 6.0 | 33 | 0.73 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Demolition | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |
| Demolition | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Demolition | Generator Sets | Diesel | Average | 2.0 | 8.0 | 15 | 0.74 |
| Demolition | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 250 | 0.43 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 2.0 | 8.0 | 84 | 0.37 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Preparation | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Site Preparation | Excavators | Diesel | Average | 2.0 | 8.0 | 36 | 0.38 |
| Site Preparation | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Site Preparation | Generator Sets | Diesel | Average | 2.0 | 7.5 | 15 | 0.74 |
| Site Preparation | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 175 | 0.43 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Grading | Graders | Diesel | Average | 1.00 | 8.0 | 148 | 0.41 |
| Grading | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Grading | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 250 | 0.43 |
| Grading | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Grading | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Building Construction | Generator Sets | Diesel | Average | 5.0 | 7.0 | 15 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 2.0 | 7.0 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 10.0 | 6.0 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.0 | 7.0 | 84 | 0.37 |
| Building Construction | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Building Construction | Excavators | Diesel | Average | 2.0 | 6.0 | 36 | 0.38 |
| Building Construction | Crawler Tractors | Diesel | Average | 4.0 | 6.0 | 175 | 0.43 |
| Building Construction | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Building Construction | Air Compressors | Diesel | Average | 5.0 | 7.0 | 37 | 0.48 |
| Paving | Pavers | Diesel | Average | 1.00 | 7.0 | 81 | 0.42 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Paving | Excavators | Diesel | Average | 1.00 | 6.0 | 36 | 0.38 |
| Paving | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Tractors/Loaders/Back | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Paving | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Paving | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Paving | Paving Equipment | Diesel | Average | 2.0 | 7.0 | 300 | 0.36 |
| Architectural Coating | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Average | 2.0 | 7.0 | 46 | 0.31 |
| Architectural Coating | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Architectural Coating | Rough Terrain Forklifts | Diesel | Average | 2.0 | 7.0 | 96 | 0.40 |
| Architectural Coating | Skid Steer Loaders | Diesel | Average | 2.0 | 7.0 | 71 | 0.37 |

### 5.2.2. Mitigated

| Phase Name | Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|---|
| Demolition | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Demolition | Concrete/Industrial Saws | Diesel | Average | 2.0 | 6.0 | 33 | 0.73 |
| Demolition | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Demolition | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |
| Demolition | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Demolition | Generator Sets | Diesel | Average | 2.0 | 8.0 | 15 | 0.74 |
| Demolition | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 250 | 0.43 |
| Demolition | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 2.0 | 8.0 | 84 | 0.37 |
| Site Preparation | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Site Preparation | Excavators | Diesel | Average | 2.0 | 8.0 | 36 | 0.38 |
| Site Preparation | Air Compressors | Diesel | Average | 2.0 | 8.0 | 37 | 0.48 |
| Site Preparation | Generator Sets | Diesel | Average | 2.0 | 7.5 | 15 | 0.74 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Site Preparation | Crawler Tractors | Diesel | Average | 1.00 | 8.0 | 175 | 0.43 |
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.0 | 367 | 0.40 |
| Grading | Graders | Diesel | Average | 1.00 | 8.0 | 148 | 0.41 |
| Grading | Excavators | Diesel | Average | 2.0 | 7.0 | 36 | 0.38 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Grading | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 250 | 0.43 |
| Grading | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Grading | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Grading | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Building Construction | Generator Sets | Diesel | Average | 5.0 | 7.0 | 15 | 0.74 |
| Building Construction | Cranes | Diesel | Average | 2.0 | 7.0 | 367 | 0.29 |
| Building Construction | Welders | Diesel | Average | 10.0 | 6.0 | 46 | 0.45 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.0 | 7.0 | 84 | 0.37 |
| Building Construction | Bore/Drill Rigs | Diesel | Average | 1.00 | 6.0 | 83 | 0.50 |
| Building Construction | Excavators | Diesel | Average | 2.0 | 6.0 | 36 | 0.38 |
| Building Construction | Crawler Tractors | Diesel | Average | 4.0 | 6.0 | 175 | 0.43 |
| Building Construction | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Building Construction | Air Compressors | Diesel | Average | 5.0 | 7.0 | 37 | 0.48 |
| Paving | Pavers | Diesel | Average | 1.00 | 7.0 | 81 | 0.42 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 36 | 0.38 |
| Paving | Excavators | Diesel | Average | 1.00 | 6.0 | 36 | 0.38 |
| Paving | Crawler Tractors | Diesel | Average | 2.0 | 8.0 | 175 | 0.43 |
| Paving | Tractors/Loaders/Backhoes | Diesel | Average | 4.0 | 7.0 | 84 | 0.37 |
| Paving | Rollers | Diesel | Average | 1.00 | 7.0 | 100 | 0.38 |
| Paving | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Paving | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Paving | Paving Equipment | Diesel | Average | 2.0 | 7.0 | 300 | 0.36 |
| Architectural Coating | Air Compressors | Diesel | Average | 2.0 | 7.0 | 37 | 0.48 |
| Architectural Coating | Aerial Lifts | Diesel | Average | 2.0 | 7.0 | 46 | 0.31 |
| Architectural Coating | Generator Sets | Diesel | Average | 2.0 | 7.0 | 15 | 0.74 |
| Architectural Coating | Rough Terrain Forklifts | Diesel | Average | 2.0 | 7.0 | 96 | 0.40 |
| Architectural Coating | Skid Steer Loaders | Diesel | Average | 2.0 | 7.0 | 71 | 0.37 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Demolition | Vendor | 4.0 | 10 | HHDT,MHDT |
| Demolition | Hauling | 120 | 20 | HHDT |
| Demolition | Onsite truck | 2.0 | 1.00 | HHDT |
| Site Preparation | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | 16 | 10 | HHDT,MHDT |
| Site Preparation | Hauling | 160 | 20 | HHDT |
| Site Preparation | Onsite truck | 2.0 | 1.00 | HHDT |
| Grading | Worker | 200 | 19 | LDA,LDT1,LDT2 |
| Grading | Vendor | 8.0 | 10 | HHDT,MHDT |
| Grading | Hauling | 240 | 20 | HHDT |
| Grading | Onsite truck | 2.0 | 2.0 | HHDT |
| Building Construction | Worker | 400 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 240 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 80 | 20 | HHDT |
| Building Construction | Onsite truck | 1.00 | 1.00 | HHDT |

| | | | | |
|---|---|---|---|---|
| Paving | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Paving | Vendor | 40 | 10 | HHDT,MHDT |
| Paving | Hauling | 8.0 | 20 | HHDT |
| Paving | Onsite truck | 1.00 | 1.00 | HHDT |
| Architectural Coating | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | 80 | 10 | HHDT,MHDT |
| Architectural Coating | Hauling | 8.0 | 20 | HHDT |
| Architectural Coating | Onsite truck | 0.00 | 0.00 | HHDT |

### 5.3.2. Mitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Demolition | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Demolition | Vendor | 4.0 | 10 | HHDT,MHDT |
| Demolition | Hauling | 120 | 20 | HHDT |
| Demolition | Onsite truck | 2.0 | 1.00 | HHDT |
| Site Preparation | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | 16 | 10 | HHDT,MHDT |
| Site Preparation | Hauling | 160 | 20 | HHDT |
| Site Preparation | Onsite truck | 2.0 | 1.00 | HHDT |
| Grading | Worker | 200 | 19 | LDA,LDT1,LDT2 |
| Grading | Vendor | 8.0 | 10 | HHDT,MHDT |
| Grading | Hauling | 240 | 20 | HHDT |
| Grading | Onsite truck | 2.0 | 2.0 | HHDT |
| Building Construction | Worker | 400 | 19 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 240 | 10 | HHDT,MHDT |
| Building Construction | Hauling | 80 | 20 | HHDT |
| Building Construction | Onsite truck | 1.00 | 1.00 | HHDT |
| Paving | Worker | 160 | 19 | LDA,LDT1,LDT2 |

| | | | | |
|---|---|---|---|---|
| Paving | Vendor | 40 | 10 | HHDT,MHDT |
| Paving | Hauling | 8.0 | 20 | HHDT |
| Paving | Onsite truck | 1.00 | 1.00 | HHDT |
| Architectural Coating | Worker | 160 | 19 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | 80 | 10 | HHDT,MHDT |
| Architectural Coating | Hauling | 8.0 | 20 | HHDT |
| Architectural Coating | Onsite truck | 0.00 | 0.00 | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

| Control Strategies Applied | PM10 Reduction | PM2.5 Reduction |
|---|---|---|
| Water unpaved roads twice daily | 55% | 55% |
| Limit vehicle speeds on unpaved roads to 25 mph | 44% | 44% |

## 5.5. Architectural Coatings

| Phase Name | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| Architectural Coating | 272,160 | 90,720 | 1,072,500 | 357,500 | 6,534 |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (Cubic Yards) | Material Exported (Cubic Yards) | Acres Graded (acres) | Material Demolished (Ton of Debris) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Demolition | 0.00 | 0.00 | 130 | 2,000 | 0.00 |
| Site Preparation | 0.00 | 0.00 | 65 | 0.00 | 0.00 |
| Grading | 0.00 | 0.00 | 195 | 0.00 | 0.00 |

| | | | | | |
|---|---|---|---|---|---|
| Building Construction | 0.00 | 0.00 | 525 | 0.00 | 0.00 |
| Paving | 0.00 | 0.00 | 65 | 0.00 | 2.5 |

### 5.6.2. Construction Earthmoving Control Strategies

| Control Strategies Applied | Frequency (per day) | PM10 Reduction | PM2.5 Reduction |
|---|---|---|---|
| Water Exposed Area | 3 | 74% | 74% |
| Water Demolished Area | 2 | 36% | 36% |

## 5.7. Construction Paving

| Phase Name | Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|---|
| Paving | Government (Civic Center) | 0.00 | 0% |
| Paving | Government (Civic Center) | 0.00 | 0% |
| Paving | Arena | 0.00 | 0% |
| Paving | High Turnover (Sit Down Restaurant) | 0.00 | 0% |
| Paving | Enclosed Parking with Elevator | 0.00 | 0% |
| Paving | Unenclosed Parking with Elevator | 0.00 | 50% |
| Paving | Regional Shopping Center | 0.00 | 0% |
| Paving | Enclosed Parking with Elevator | 0.00 | 50% |
| Paving | Apartments Mid Rise | — | 0% |
| Paving | Government (Civic Center) | 0.00 | 0% |
| Paving | High Turnover (Sit Down Restaurant) | 0.00 | 0% |
| Paving | Other Asphalt Surfaces | 0.70 | 100% |
| Paving | Other Non-Asphalt Surfaces | 1.8 | 0% |
| Paving | Unenclosed Parking with Elevator | 0.00 | 100% |
| Paving | Library | 0.00 | 0% |
| Paving | Movie Theater (No Matinee) | 0.00 | 0% |

## 5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2026 | 0.00 | 346 | 0.03 | < 0.005 |
| 2027 | 0.00 | 346 | 0.03 | < 0.005 |
| 2028 | 0.00 | 346 | 0.03 | < 0.005 |

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| Arena | Wood Fireplaces | 0 | 0 |
| Arena | Gas Fireplaces | 0 | 0 |
| Arena | Propane Fireplaces | 0 | 0 |
| Arena | Electric Fireplaces | 0 | 0 |
| Arena | No Fireplaces | 0 | 0 |
| Arena | Conventional Wood Stoves | 0 | 0 |
| Arena | Catalytic Wood Stoves | 0 | 0 |
| Arena | Non-Catalytic Wood Stoves | 0 | 0 |
| Arena | Pellet Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Wood Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Gas Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Propane Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Electric Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | No Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Conventional Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Catalytic Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| High Turnover (Sit Down Restaurant) | Non-Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Pellet Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Regional Shopping Center | Wood Fireplaces | 0 | 0 |
| Regional Shopping Center | Gas Fireplaces | 0 | 0 |
| Regional Shopping Center | Propane Fireplaces | 0 | 0 |
| Regional Shopping Center | Electric Fireplaces | 0 | 0 |
| Regional Shopping Center | No Fireplaces | 0 | 0 |
| Regional Shopping Center | Conventional Wood Stoves | 0 | 0 |
| Regional Shopping Center | Catalytic Wood Stoves | 0 | 0 |
| Regional Shopping Center | Non-Catalytic Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Regional Shopping Center | Pellet Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Enclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Enclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Wood Fireplaces | 0 | 0 |
| Apartments Mid Rise | Gas Fireplaces | 0 | 0 |
| Apartments Mid Rise | Propane Fireplaces | 0 | 0 |
| Apartments Mid Rise | Electric Fireplaces | 0 | 0 |
| Apartments Mid Rise | No Fireplaces | 0 | 0 |
| Apartments Mid Rise | Conventional Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Catalytic Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Non-Catalytic Wood Stoves | 0 | 0 |
| Apartments Mid Rise | Pellet Wood Stoves | 0 | 0 |
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| High Turnover (Sit Down Restaurant) | Wood Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Gas Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Propane Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Electric Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | No Fireplaces | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Conventional Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Non-Catalytic Wood Stoves | 0 | 0 |
| High Turnover (Sit Down Restaurant) | Pellet Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Wood Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Gas Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Propane Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Electric Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | No Fireplaces | 0 | 0 |
| Other Asphalt Surfaces | Conventional Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Catalytic Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Non-Catalytic Wood Stoves | 0 | 0 |
| Other Asphalt Surfaces | Pellet Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Wood Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Gas Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Propane Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Electric Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | No Fireplaces | 0 | 0 |
| Other Non-Asphalt Surfaces | Conventional Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Catalytic Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Non-Catalytic Wood Stoves | 0 | 0 |
| Other Non-Asphalt Surfaces | Pellet Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Wood Fireplaces | 0 | 0 |

| | | | |
|---|---|---|---|
| Unenclosed Parking with Elevator | Gas Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Propane Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Electric Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | No Fireplaces | 0 | 0 |
| Unenclosed Parking with Elevator | Conventional Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Non-Catalytic Wood Stoves | 0 | 0 |
| Unenclosed Parking with Elevator | Pellet Wood Stoves | 0 | 0 |
| Library | Wood Fireplaces | 0 | 0 |
| Library | Gas Fireplaces | 0 | 0 |
| Library | Propane Fireplaces | 0 | 0 |
| Library | Electric Fireplaces | 0 | 0 |
| Library | No Fireplaces | 0 | 0 |
| Library | Conventional Wood Stoves | 0 | 0 |
| Library | Catalytic Wood Stoves | 0 | 0 |
| Library | Non-Catalytic Wood Stoves | 0 | 0 |
| Library | Pellet Wood Stoves | 0 | 0 |
| Movie Theater (No Matinee) | Wood Fireplaces | 0 | 0 |
| Movie Theater (No Matinee) | Gas Fireplaces | 0 | 0 |
| Movie Theater (No Matinee) | Propane Fireplaces | 0 | 0 |
| Movie Theater (No Matinee) | Electric Fireplaces | 0 | 0 |
| Movie Theater (No Matinee) | No Fireplaces | 0 | 0 |
| Movie Theater (No Matinee) | Conventional Wood Stoves | 0 | 0 |
| Movie Theater (No Matinee) | Catalytic Wood Stoves | 0 | 0 |
| Movie Theater (No Matinee) | Non-Catalytic Wood Stoves | 0 | 0 |
| Movie Theater (No Matinee) | Pellet Wood Stoves | 0 | 0 |

## 5.10.2. Architectural Coatings

| — | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| undefined | 272,160 | 90,720 | 1,072,500 | 357,500 | 6,534 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 1,140,498 | 261 | 0.0330 | 0.0040 | 1,622,174 |
| Government (Civic Center) | 3,332,394 | 261 | 0.0330 | 0.0040 | 4,739,789 |
| Arena | 1,189,499 | 261 | 0.0330 | 0.0040 | 5,307,441 |
| High Turnover (Sit Down Restaurant) | 346,303 | 261 | 0.0330 | 0.0040 | 1,151,316 |
| Enclosed Parking with Elevator | 926,549 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 676,320 | 261 | 0.0330 | 0.0040 | 0.00 |
| Regional Shopping Center | 1,276,778 | 261 | 0.0330 | 0.0040 | 778,303 |

| | | | | | |
|---|---|---|---|---|---|
| Enclosed Parking with Elevator | 1,384,287 | 261 | 0.0330 | 0.0040 | 0.00 |
| Apartments Mid Rise | 513,217 | 261 | 0.0330 | 0.0040 | 1,554,958 |
| Government (Civic Center) | 1,603,826 | 261 | 0.0330 | 0.0040 | 2,281,182 |
| High Turnover (Sit Down Restaurant) | 1,038,910 | 261 | 0.0330 | 0.0040 | 3,453,948 |
| Other Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 169,080 | 261 | 0.0330 | 0.0040 | 0.00 |
| Library | 287,782 | 261 | 0.0330 | 0.0040 | 1,284,058 |
| Movie Theater (No Matinee) | 479,637 | 261 | 0.0330 | 0.0040 | 2,140,097 |

### 5.11.2. Mitigated

#### Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 1,139,902 | 261 | 0.0330 | 0.0040 | 1,622,174 |
| Government (Civic Center) | 3,330,652 | 261 | 0.0330 | 0.0040 | 4,739,789 |
| Arena | 1,185,743 | 261 | 0.0330 | 0.0040 | 5,307,441 |
| High Turnover (Sit Down Restaurant) | 296,615 | 261 | 0.0330 | 0.0040 | 1,151,316 |
| Enclosed Parking with Elevator | 926,549 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 676,320 | 261 | 0.0330 | 0.0040 | 0.00 |
| Regional Shopping Center | 1,259,942 | 261 | 0.0330 | 0.0040 | 778,303 |
| Enclosed Parking with Elevator | 1,384,287 | 261 | 0.0330 | 0.0040 | 0.00 |
| Apartments Mid Rise | 485,063 | 261 | 0.0330 | 0.0040 | 1,544,356 |
| Government (Civic Center) | 1,602,988 | 261 | 0.0330 | 0.0040 | 2,281,182 |

| | | | | | |
|---|---|---|---|---|---|
| High Turnover (Sit Down Restaurant) | 889,846 | 261 | 0.0330 | 0.0040 | 3,453,948 |
| Other Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 261 | 0.0330 | 0.0040 | 0.00 |
| Unenclosed Parking with Elevator | 169,080 | 261 | 0.0330 | 0.0040 | 0.00 |
| Library | 286,873 | 261 | 0.0330 | 0.0040 | 1,284,058 |
| Movie Theater (No Matinee) | 479,637 | 261 | 0.0330 | 0.0040 | 2,140,097 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 4,849,900 | 607,377 |
| Government (Civic Center) | 14,928,500 | 519,232 |
| Arena | 5,657,500 | 990,486 |
| High Turnover (Sit Down Restaurant) | 0.00 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Regional Shopping Center | 36,135,000 | 193,539 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 9,249,100 | 96,162 |
| Government (Civic Center) | 6,820,200 | 1,209,971 |
| High Turnover (Sit Down Restaurant) | 9,106,011 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 3,193,750 | 0.00 |
| Movie Theater (No Matinee) | 20,080,073 | 0.00 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 4,418,259 | 607,377 |
| Government (Civic Center) | 13,665,549 | 519,232 |
| Arena | 5,156,246 | 990,486 |
| High Turnover (Sit Down Restaurant) | 0.00 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Regional Shopping Center | 31,867,457 | 193,539 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 7,851,561 | 96,162 |
| Government (Civic Center) | 6,243,211 | 1,209,971 |
| High Turnover (Sit Down Restaurant) | 8,359,318 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 3,193,750 | 0.00 |
| Movie Theater (No Matinee) | 20,080,073 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 365 | 0.00 |
| Government (Civic Center) | 1,066 | 0.00 |
| Arena | 3.4 | 0.00 |
| High Turnover (Sit Down Restaurant) | 119 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |

| | | |
|---|---|---|
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Regional Shopping Center | 137 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 75 | 0.00 |
| Government (Civic Center) | 513 | 0.00 |
| High Turnover (Sit Down Restaurant) | 357 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Library | 28 | 0.00 |
| Movie Theater (No Matinee) | 285 | 0.00 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 365 | 0.00 |
| Government (Civic Center) | 1,066 | 0.00 |
| Arena | 3.4 | 0.00 |
| High Turnover (Sit Down Restaurant) | 119 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |
| Regional Shopping Center | 137 | 0.00 |
| Enclosed Parking with Elevator | 0.00 | 0.00 |
| Apartments Mid Rise | 75 | 0.00 |
| Government (Civic Center) | 513 | 0.00 |
| High Turnover (Sit Down Restaurant) | 357 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |
| Other Non-Asphalt Surfaces | 0.00 | 0.00 |
| Unenclosed Parking with Elevator | 0.00 | 0.00 |

| | | |
|---|---|---|
| Library | 28 | 0.00 |
| Movie Theater (No Matinee) | 285 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Arena | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Regional Shopping Center | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Regional Shopping Center | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.5 | 2.5 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Movie Theater (No Matinee) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Movie Theater (No Matinee) | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Movie Theater (No Matinee) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Arena | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Arena | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Regional Shopping Center | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Regional Shopping Center | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Apartments Mid Rise | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.5 | 2.5 | 10.0 |
| Apartments Mid Rise | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.00 | 0.60 | 0.00 | 1.00 |
| High Turnover (Sit Down Restaurant) | Other commercial A/C and heat pumps | R-410A | 2,088 | 1.8 | 4.0 | 4.0 | 18 |
| High Turnover (Sit Down Restaurant) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Library | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Library | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Library | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | < 0.005 | 1.00 | 0.00 | 1.00 |
| Library | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |
| Movie Theater (No Matinee) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Movie Theater (No Matinee) | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |
| Movie Theater (No Matinee) | Walk-in refrigerators and freezers | R-404A | 3,922 | < 0.005 | 7.5 | 7.5 | 20 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|
| Forklifts | Diesel | Average | 6.0 | 8.0 | 82 | 0.20 |

### 5.15.2. Mitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|
| Forklifts | Diesel | Average | 6.0 | 8.0 | 82 | 0.20 |

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 5.1 | annual days of extreme heat |
| Extreme Precipitation | 4.2 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 0.00 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 2 | 2 | 2 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 2 | 2 | 2 |
| Wildfire | 1 | 2 | 2 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 5 | 3 | 3 | 3 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 2 | 1 | 3 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 2 | 2 | 2 |

| | | | | |
|---|---|---|---|---|
| Wildfire | 1 | 2 | 2 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 5 | 3 | 3 | 3 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

### 6.4.1. Temperature and Extreme Heat

| User Selected Measures | Co-Benefits Achieved | Exposure Reduction | Sensitivity Reduction | Adaptive Capacity Increase |
|---|---|---|---|---|
| D-3: Install Drought Resistant Landscaping | Water Conservation | — | 1.00 | 1.00 |

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 22 |
| AQ-PM | 81 |
| AQ-DPM | 86 |
| Drinking Water | 29 |
| Lead Risk Housing | 60 |
| Pesticides | 0.00 |

| | |
|---|---|
| Toxic Releases | 99 |
| Traffic | 95 |
| Effect Indicators | — |
| CleanUp Sites | 89 |
| Groundwater | 94 |
| Haz Waste Facilities/Generators | 67 |
| Impaired Water Bodies | 93 |
| Solid Waste | 55 |
| Sensitive Population | — |
| Asthma | 77 |
| Cardio-vascular | 83 |
| Low Birth Weights | 75 |
| Socioeconomic Factor Indicators | — |
| Education | 62 |
| Housing | 28 |
| Linguistic | 77 |
| Poverty | 50 |
| Unemployment | 43 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 57.92377775 |
| Employed | 62.37649172 |
| Median HI | 55.88348518 |
| Education | — |
| Bachelor's or higher | 53.18875914 |

| | |
|---|---|
| High school enrollment | 100 |
| Preschool enrollment | 48.45374054 |
| Transportation | — |
| Auto Access | 31.27165405 |
| Active commuting | 35.41639933 |
| Social | — |
| 2-parent households | 72.60361863 |
| Voting | 9.29038881 |
| Neighborhood | — |
| Alcohol availability | 51.72590787 |
| Park access | 27.21673297 |
| Retail density | 43.47491338 |
| Supermarket access | 40.56204286 |
| Tree canopy | 50.87899397 |
| Housing | — |
| Homeownership | 92.2751187 |
| Housing habitability | 75.06736815 |
| Low-inc homeowner severe housing cost burden | 74.6439112 |
| Low-inc renter severe housing cost burden | 51.52059541 |
| Uncrowded housing | 28.33311947 |
| Health Outcomes | — |
| Insured adults | 43.11561658 |
| Arthritis | 59.3 |
| Asthma ER Admissions | 30.5 |
| High Blood Pressure | 37.6 |
| Cancer (excluding skin) | 49.7 |
| Asthma | 94.4 |
| Coronary Heart Disease | 54.4 |

| | |
|---|---|
| Chronic Obstructive Pulmonary Disease | 74.0 |
| Diagnosed Diabetes | 25.3 |
| Life Expectancy at Birth | 63.6 |
| Cognitively Disabled | 50.3 |
| Physically  Disabled | 14.3 |
| Heart Attack ER Admissions | 25.8 |
| Mental Health Not Good | 69.9 |
| Chronic Kidney Disease | 45.1 |
| Obesity | 76.5 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 51.8 |
| Stroke | 51.7 |
| Health Risk Behaviors | — |
| Binge Drinking | 89.1 |
| Current Smoker | 71.8 |
| No Leisure Time for Physical Activity | 41.3 |
| Climate Change Exposures | — |
| Wildfire Risk | 0.0 |
| SLR Inundation Area | 0.0 |
| Children | 68.4 |
| Elderly | 14.5 |
| English Speaking | 25.4 |
| Foreign-born | 90.0 |
| Outdoor Workers | 75.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 11.0 |
| Traffic Density | 92.2 |
| Traffic Access | 61.6 |

| | |
|---|---|
| Other Indices | — |
| Hardship | 56.0 |
| Other Decision Support | — |
| 2016 Voting | 18.3 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 92 |
| Healthy Places Index Score for Project Location (b) | 51 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | Wilmington Long Beach Carson |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Land Use | Proposed Specific Plan (Option) Uses |
| Construction: Construction Phases | High-Level Assumptions Based on Completion mid-2028. |

| | |
|---|---|
| Construction: Off-Road Equipment | Equipment lists populated based on experiential knowledge. 100 hp Roller = Compactor<br>175 hp Crawler Tractor = Gradall<br>250 hp Crawler Tractor = Dozer<br>300 hp Paving Equip = Concrete Truck PTO |
| Construction: Dust From Material Movement | Quantities estimated based off preliminary design plans. |
| Construction: Trips and VMT | High-Level Estimates based on Project Scale and Schedule. |
| Construction: On-Road Fugitive Dust | Site will never be entirely unpaved/exposed ground surface. |
| Construction: Paving | Subterranean parking structures will be concrete or A/C, not standard asphalt. |
| Operations: Hearths | No Hearths or Wood Stoves. |
| Operations: Architectural Coatings | Repainting every 20 years. |
| Operations: Water and Waste Water | Indoor water use rates obtained from Civic Center Specific Plan (December 2, 2025). Restaurant indoor water use combined with New City Hall & Hotel.<br><br>Existing uses to be renovated were estimated by scaling factor of 75.78 gal/sf/year based on the New City Hall. |

# CalEEMod – Existing Conditions

# Carson Civic Center Existing Conditions Detailed Report

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# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | Carson Civic Center Existing Conditions |
| Operational Year | 2025 |
| Lead Agency | — |
| Land Use Scale | Plan/community |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 3.5 |
| Precipitation (days) | 17 |
| Location | 33.83254920370301, -118.26290983813647 |
| County | Los Angeles-South Coast |
| City | Carson |
| Air District | South Coast AQMD |
| Air Basin | South Coast |
| TAZ | 4617 |
| EDFZ | 7 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |
| App Version | 2022.1.1.35 |

## 1.2. Land Use Types

| Land Use Subtype | Size | Unit | Lot Acreage | Building Area (sq ft) | Landscape Area (sq ft) | Special Landscape Area (sq ft) | Population | Description |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 64 | 1000sqft | 2.5 | 64,000 | 40,000 | 0.00 | — | Existing City Hall Reno |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | 90 | 1000sqft | 3.8 | 90,000 | 75,000 | 0.00 | — | Ex Events Center Reno |
| Parking Lot | 1.4 | Acre | 1.4 | 0.00 | 0.00 | 0.00 | — | Ex NW P Lot |
| Parking Lot | 1.8 | Acre | 1.8 | 0.00 | 0.00 | 0.00 | — | Ex NW P2 Lot |
| Parking Lot | 3.5 | Acre | 3.5 | 0.00 | 0.00 | 0.00 | — | Ex East P Lot |

### 1.3. User-Selected Emission Reduction Measures by Emissions Sector

| Sector | # | Measure Title |
|---|---|---|
| Construction | C-2* | Limit Heavy-Duty Diesel Vehicle Idling |
| Construction | C-4* | Use Local and Sustainable Building Materials |
| Transportation | T-34* | Provide Bike Parking |

* Qualitative or supporting measure. Emission reductions not included in the mitigated emissions results.

## 2. Emissions Summary

### 2.4. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Un/Mit. | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.7 | 1.1 | 7.6 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,313 | 4,834 | 53 | 0.15 | 0.37 | 6,195 |
| Mit. | 4.7 | 1.1 | 7.6 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,313 | 4,834 | 53 | 0.15 | 0.37 | 6,195 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.6 | 1.0 | 0.88 | 0.01 | 0.08 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 521 | 4,285 | 4,806 | 53 | 0.15 | 0.37 | 6,167 |
| Mit. | 3.6 | 1.0 | 0.88 | 0.01 | 0.08 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 521 | 4,285 | 4,806 | 53 | 0.15 | 0.37 | 6,167 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 4.3 | 1.1 | 5.5 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,304 | 4,825 | 53 | 0.15 | 0.37 | 6,186 |
| Mit. | 4.3 | 1.1 | 5.5 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,304 | 4,825 | 53 | 0.15 | 0.37 | 6,186 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.79 | 0.20 | 1.00 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 86 | 713 | 799 | 8.7 | 0.03 | 0.06 | 1,024 |
| Mit. | 0.79 | 0.20 | 1.00 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 86 | 713 | 799 | 8.7 | 0.03 | 0.06 | 1,024 |
| % Reduced | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Exceeds (Daily Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 55 | 55 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Exceeds (Average Daily) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Threshold | 55 | 55 | 550 | 150 | — | — | 150 | — | — | 55 | — | — | — | — | — | — | — |
| Unmit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |
| Mit. | No | No | No | No | — | — | No | — | — | No | — | — | — | — | — | — | — |

## 2.5. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 4.6 | 0.06 | 6.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Energy | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,115 | 4,115 | 0.38 | 0.04 | — | 4,135 |
| Water | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Waste | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | 4.7 | 1.1 | 7.6 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,313 | 4,834 | 53 | 0.15 | 0.37 | 6,195 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 3.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,115 | 4,115 | 0.38 | 0.04 | — | 4,135 |
| Water | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Waste | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | 3.6 | 1.0 | 0.88 | 0.01 | 0.08 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 521 | 4,285 | 4,806 | 53 | 0.15 | 0.37 | 6,167 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 4.3 | 0.04 | 4.6 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 19 | 19 | < 0.005 | < 0.005 | — | 19 |
| Energy | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,115 | 4,115 | 0.38 | 0.04 | — | 4,135 |
| Water | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Waste | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | 4.3 | 1.1 | 5.5 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,304 | 4,825 | 53 | 0.15 | 0.37 | 6,186 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 0.78 | 0.01 | 0.84 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.1 | 3.1 | < 0.005 | < 0.005 | — | 3.1 |
| Energy | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 681 | 681 | 0.06 | 0.01 | — | 685 |
| Water | — | — | — | — | — | — | — | — | — | — | 7.9 | 28 | 36 | 0.82 | 0.02 | — | 62 |
| Waste | — | — | — | — | — | — | — | — | — | — | 78 | 0.00 | 78 | 7.8 | 0.00 | — | 274 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 | |
| Total | 0.79 | 0.20 | 1.00 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 86 | 713 | 799 | 8.7 | 0.03 | 0.06 | 1,024 |

## 2.6. Operations Emissions by Sector, Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Sector | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 4.6 | 0.06 | 6.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Energy | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,115 | 4,115 | 0.38 | 0.04 | — | 4,135 |
| Water | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Waste | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 | |
| Total | 4.7 | 1.1 | 7.6 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,313 | 4,834 | 53 | 0.15 | 0.37 | 6,195 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 3.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Energy | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,115 | 4,115 | 0.38 | 0.04 | — | 4,135 |
| Water | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Waste | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | 3.6 | 1.0 | 0.88 | 0.01 | 0.08 | 0.00 | 0.08 | 0.08 | 0.00 | 0.08 | 521 | 4,285 | 4,806 | 53 | 0.15 | 0.37 | 6,167 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 4.3 | 0.04 | 4.6 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 19 | 19 | < 0.005 | < 0.005 | — | 19 |
| Energy | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 4,115 | 4,115 | 0.38 | 0.04 | — | 4,135 |
| Water | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Waste | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | 4.3 | 1.1 | 5.5 | 0.01 | 0.09 | 0.00 | 0.09 | 0.09 | 0.00 | 0.09 | 521 | 4,304 | 4,825 | 53 | 0.15 | 0.37 | 6,186 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Area | 0.78 | 0.01 | 0.84 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.1 | 3.1 | < 0.005 | < 0.005 | — | 3.1 |
| Energy | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 681 | 681 | 0.06 | 0.01 | — | 685 |
| Water | — | — | — | — | — | — | — | — | — | — | 7.9 | 28 | 36 | 0.82 | 0.02 | — | 62 |
| Waste | — | — | — | — | — | — | — | — | — | — | 78 | 0.00 | 78 | 7.8 | 0.00 | — | 274 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |
| Total | 0.79 | 0.20 | 1.00 | < 0.005 | 0.02 | 0.00 | 0.02 | 0.02 | 0.00 | 0.02 | 86 | 713 | 799 | 8.7 | 0.03 | 0.06 | 1,024 |

# 4. Operations Emissions Details

## 4.1. Mobile Emissions by Land Use

### 4.1.1. Unmitigated

Mobile source emissions results are presented in Sections 2.6. No further detailed breakdown of emissions is available.

### 4.1.2. Mitigated

Mobile source emissions results are presented in Sections 2.5. No further detailed breakdown of emissions is available.

## 4.2. Energy

### 4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 2,621 | 2,621 | 0.25 | 0.03 | — | 2,636 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 242 | 242 | 0.02 | < 0.005 | — | 244 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,864 | 2,864 | 0.27 | 0.03 | — | 2,880 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 2,621 | 2,621 | 0.25 | 0.03 | — | 2,636 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 242 | 242 | 0.02 | < 0.005 | — | 244 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,864 | 2,864 | 0.27 | 0.03 | — | 2,880 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 434 | 434 | 0.04 | < 0.005 | — | 436 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 40 | 40 | < 0.005 | < 0.005 | — | 40 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 474 | 474 | 0.04 | 0.01 | — | 477 |

## 4.2.2. Electricity Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 2,621 | 2,621 | 0.25 | 0.03 | — | 2,636 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 242 | 242 | 0.02 | < 0.005 | — | 244 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,864 | 2,864 | 0.27 | 0.03 | — | 2,880 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 2,621 | 2,621 | 0.25 | 0.03 | — | 2,636 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 242 | 242 | 0.02 | < 0.005 | — | 244 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2,864 | 2,864 | 0.27 | 0.03 | — | 2,880 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | 434 | 434 | 0.04 | < 0.005 | — | 436 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 40 | 40 | < 0.005 | < 0.005 | — | 40 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 474 | 474 | 0.04 | 0.01 | — | 477 |

## 4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 207 | 207 | 0.02 | < 0.005 | — | 208 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 207 | 207 | 0.02 | < 0.005 | — | 208 |

### 4.2.4. Natural Gas Emissions By Land Use - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.06 | 1.0 | 0.88 | 0.01 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 1,251 | 1,251 | 0.11 | < 0.005 | — | 1,254 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 207 | 207 | 0.02 | < 0.005 | — | 208 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.01 | 0.19 | 0.16 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 207 | 207 | 0.02 | < 0.005 | — | 208 |

## 4.3. Area Emissions by Source

### 4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.1 | 0.06 | 6.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Total | 4.6 | 0.06 | 6.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 3.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.14 | 0.01 | 0.84 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.1 | 3.1 | < 0.005 | < 0.005 | — | 3.1 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 0.78 | 0.01 | 0.84 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.1 | 3.1 | < 0.005 | < 0.005 | — | 3.1 |

### 4.3.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Source | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 1.1 | 0.06 | 6.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Total | 4.6 | 0.06 | 6.7 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 28 | 28 | < 0.005 | < 0.005 | — | 28 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 3.3 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | 0.21 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 3.5 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Consumer Products | 0.61 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural Coatings | 0.04 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.14 | 0.01 | 0.84 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.1 | 3.1 | < 0.005 | < 0.005 | — | 3.1 |
| Total | 0.78 | 0.01 | 0.84 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 3.1 | 3.1 | < 0.005 | < 0.005 | — | 3.1 |

## 4.4. Water Emissions by Land Use

### 4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 7.9 | 28 | 36 | 0.82 | 0.02 | — | 62 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 7.9 | 28 | 36 | 0.82 | 0.02 | — | 62 |

### 4.4.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 48 | 171 | 219 | 4.9 | 0.12 | — | 377 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | 7.9 | 28 | 36 | 0.82 | 0.02 | — | 62 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 7.9 | 28 | 36 | 0.82 | 0.02 | — | 62 |

## 4.5. Waste Emissions by Land Use

### 4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Governm (Civic Center) | — | — | — | — | — | — | — | — | — | — | 78 | 0.00 | 78 | 7.8 | 0.00 | — | 274 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 78 | 0.00 | 78 | 7.8 | 0.00 | — | 274 |

### 4.5.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 473 | 0.00 | 473 | 47 | 0.00 | — | 1,655 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | 78 | 0.00 | 78 | 7.8 | 0.00 | — | 274 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | 78 | 0.00 | 78 | 7.8 | 0.00 | — | 274 |

## 4.6. Refrigerant Emissions by Land Use

### 4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |

### 4.6.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.37 | 0.37 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Government (Civic Center) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.06 | 0.06 |

## 4.7. Offroad Emissions By Equipment Type

### 4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipme Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.7.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.8. Stationary Emissions By Equipment Type

### 4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.8.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. User Defined Emissions By Equipment Type

### 4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.9.2. Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Equipment Type | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10. Soil Carbon Accumulation By Vegetation Type

### 4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.4. Soil Carbon Accumulation By Vegetation Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Vegetation | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

### 4.10.5. Above and Belowground Carbon Accumulation by Land Use Type - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Land Use | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.10.6. Avoided and Sequestered Emissions by Species - Mitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

| Species | ROG | NOx | CO | SO2 | PM10E | PM10D | PM10T | PM2.5E | PM2.5D | PM2.5T | BCO2 | NBCO2 | CO2T | CH4 | N2O | R | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Avoided | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Sequestered | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Subtotal | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

# 5. Activity Data

## 5.9. Operational Mobile Sources

### 5.9.1. Unmitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

### 5.9.2. Mitigated

| Land Use Type | Trips/Weekday | Trips/Saturday | Trips/Sunday | Trips/Year | VMT/Weekday | VMT/Saturday | VMT/Sunday | VMT/Year |
|---|---|---|---|---|---|---|---|---|
| Total all Land Uses | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

| Land Use | Hearth Type | Unmitigated (number) | Mitigated (number) |
|---|---|---|---|
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| Government (Civic Center) | Wood Fireplaces | 0 | 0 |
| Government (Civic Center) | Gas Fireplaces | 0 | 0 |
| Government (Civic Center) | Propane Fireplaces | 0 | 0 |
| Government (Civic Center) | Electric Fireplaces | 0 | 0 |
| Government (Civic Center) | No Fireplaces | 0 | 0 |
| Government (Civic Center) | Conventional Wood Stoves | 0 | 0 |
| Government (Civic Center) | Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Non-Catalytic Wood Stoves | 0 | 0 |
| Government (Civic Center) | Pellet Wood Stoves | 0 | 0 |
| Parking Lot | Wood Fireplaces | 0 | 0 |
| Parking Lot | Gas Fireplaces | 0 | 0 |
| Parking Lot | Propane Fireplaces | 0 | 0 |
| Parking Lot | Electric Fireplaces | 0 | 0 |
| Parking Lot | No Fireplaces | 0 | 0 |
| Parking Lot | Conventional Wood Stoves | 0 | 0 |
| Parking Lot | Catalytic Wood Stoves | 0 | 0 |
| Parking Lot | Non-Catalytic Wood Stoves | 0 | 0 |
| Parking Lot | Pellet Wood Stoves | 0 | 0 |

| | | | |
|---|---|---|---|
| Parking Lot | Wood Fireplaces | 0 | 0 |
| Parking Lot | Gas Fireplaces | 0 | 0 |
| Parking Lot | Propane Fireplaces | 0 | 0 |
| Parking Lot | Electric Fireplaces | 0 | 0 |
| Parking Lot | No Fireplaces | 0 | 0 |
| Parking Lot | Conventional Wood Stoves | 0 | 0 |
| Parking Lot | Catalytic Wood Stoves | 0 | 0 |
| Parking Lot | Non-Catalytic Wood Stoves | 0 | 0 |
| Parking Lot | Pellet Wood Stoves | 0 | 0 |
| Parking Lot | Wood Fireplaces | 0 | 0 |
| Parking Lot | Gas Fireplaces | 0 | 0 |
| Parking Lot | Propane Fireplaces | 0 | 0 |
| Parking Lot | Electric Fireplaces | 0 | 0 |
| Parking Lot | No Fireplaces | 0 | 0 |
| Parking Lot | Conventional Wood Stoves | 0 | 0 |
| Parking Lot | Catalytic Wood Stoves | 0 | 0 |
| Parking Lot | Non-Catalytic Wood Stoves | 0 | 0 |
| Parking Lot | Pellet Wood Stoves | 0 | 0 |

### 5.10.2. Architectural Coatings

| — | Residential Interior Area Coated (sq ft) | Residential Exterior Area Coated (sq ft) | Non-Residential Interior Area Coated (sq ft) | Non-Residential Exterior Area Coated (sq ft) | Parking Area Coated (sq ft) |
|---|---|---|---|---|---|
| undefined | 0.00 | 0.00 | 231,000 | 77,000 | 17,380 |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

### 5.10.4. Landscape Equipment - Mitigated

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |
| Summer Days | day/yr | 250 |

## 5.11. Operational Energy Consumption

### 5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 1,140,498 | 349 | 0.0330 | 0.0040 | 1,622,174 |
| Government (Civic Center) | 1,603,826 | 349 | 0.0330 | 0.0040 | 2,281,182 |
| Parking Lot | 55,330 | 349 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 66,777 | 349 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 131,647 | 349 | 0.0330 | 0.0040 | 0.00 |

### 5.11.2. Mitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

| Land Use | Electricity (kWh/yr) | CO2 | CH4 | N2O | Natural Gas (kBTU/yr) |
|---|---|---|---|---|---|
| Government (Civic Center) | 1,140,498 | 349 | 0.0330 | 0.0040 | 1,622,174 |
| Government (Civic Center) | 1,603,826 | 349 | 0.0330 | 0.0040 | 2,281,182 |
| Parking Lot | 55,330 | 349 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 66,777 | 349 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 131,647 | 349 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 10,000,000 | 560,983 |
| Government (Civic Center) | 15,000,000 | 1,051,844 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

### 5.12.2. Mitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Government (Civic Center) | 10,000,000 | 560,983 |
| Government (Civic Center) | 15,000,000 | 1,051,844 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 365 | 0.00 |
| Government (Civic Center) | 513 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

### 5.13.2. Mitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Government (Civic Center) | 365 | 0.00 |
| Government (Civic Center) | 513 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |

### 5.14.2. Mitigated

| Land Use | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |
| Government (Civic Center) | Household refrigerators and/or freezers | R-134a | 1,430 | 0.02 | 0.60 | 0.00 | 1.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Government (Civic Center) | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.0 | 4.0 | 18 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

### 5.15.2. Mitigated

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

### 5.16.2. Process Boilers

## 5.17. User Defined

## 5.18. Vegetation

### 5.18.1. Land Use Change

#### 5.18.1.1. Unmitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

#### 5.18.1.2. Mitigated

| Vegetation Land Use Type | Vegetation Soil Type | Initial Acres | Final Acres |
|---|---|---|---|

### 5.18.1. Biomass Cover Type

#### 5.18.1.1. Unmitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

#### 5.18.1.2. Mitigated

| Biomass Cover Type | Initial Acres | Final Acres |
|---|---|---|

### 5.18.2. Sequestration

#### 5.18.2.1. Unmitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

#### 5.18.2.2. Mitigated

| Tree Type | Number | Electricity Saved (kWh/year) | Natural Gas Saved (btu/year) |
|---|---|---|---|

# 6. Climate Risk Detailed Report

## 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 5.1 | annual days of extreme heat |
| Extreme Precipitation | 4.2 | annual days with precipitation above 20 mm |
| Sea Level Rise | — | meters of inundation depth |
| Wildfire | 0.00 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (Radke et al., 2017, CEC-500-2017-008), and consider inundation location and depth for the San Francisco Bay, the Sacramento-San Joaquin River Delta and California coast resulting different increments of sea level rise coupled with extreme storm events. Users may select from four scenarios to view the range in potential inundation depth for the grid cell. The four scenarios are: No rise, 0.5 meter, 1.0 meter, 1.41 meters

Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 2 | 2 | 2 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 2 | 2 | 2 |
| Wildfire | 1 | 2 | 2 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 5 | 3 | 3 | 3 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 2 | 1 | 3 | 2 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 2 | 2 | 2 |
| Wildfire | 1 | 2 | 2 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 5 | 3 | 3 | 3 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

### 6.4.1. Temperature and Extreme Heat

| User Selected Measures | Co-Benefits Achieved | Exposure Reduction | Sensitivity Reduction | Adaptive Capacity Increase |
|---|---|---|---|---|
| D-3: Install Drought Resistant Landscaping | Water Conservation | — | 1.00 | 1.00 |

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 22 |
| AQ-PM | 81 |
| AQ-DPM | 86 |
| Drinking Water | 29 |
| Lead Risk Housing | 60 |
| Pesticides | 0.00 |
| Toxic Releases | 99 |
| Traffic | 95 |
| Effect Indicators | — |
| CleanUp Sites | 89 |
| Groundwater | 94 |

| | |
|---|---|
| Haz Waste Facilities/Generators | 67 |
| Impaired Water Bodies | 93 |
| Solid Waste | 55 |
| Sensitive Population | — |
| Asthma | 77 |
| Cardio-vascular | 83 |
| Low Birth Weights | 75 |
| Socioeconomic Factor Indicators | — |
| Education | 62 |
| Housing | 28 |
| Linguistic | 77 |
| Poverty | 50 |
| Unemployment | 43 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 57.92377775 |
| Employed | 62.37649172 |
| Median HI | 55.88348518 |
| Education | — |
| Bachelor's or higher | 53.18875914 |
| High school enrollment | 100 |
| Preschool enrollment | 48.45374054 |
| Transportation | — |
| Auto Access | 31.27165405 |
| Active commuting | 35.41639933 |

| | |
|---|---|
| Social | — |
| 2-parent households | 72.60361863 |
| Voting | 9.29038881 |
| Neighborhood | — |
| Alcohol availability | 51.72590787 |
| Park access | 27.21673297 |
| Retail density | 43.47491338 |
| Supermarket access | 40.56204286 |
| Tree canopy | 50.87899397 |
| Housing | — |
| Homeownership | 92.2751187 |
| Housing habitability | 75.06736815 |
| Low-inc homeowner severe housing cost burden | 74.6439112 |
| Low-inc renter severe housing cost burden | 51.52059541 |
| Uncrowded housing | 28.33311947 |
| Health Outcomes | — |
| Insured adults | 43.11561658 |
| Arthritis | 59.3 |
| Asthma ER Admissions | 30.5 |
| High Blood Pressure | 37.6 |
| Cancer (excluding skin) | 49.7 |
| Asthma | 94.4 |
| Coronary Heart Disease | 54.4 |
| Chronic Obstructive Pulmonary Disease | 74.0 |
| Diagnosed Diabetes | 25.3 |
| Life Expectancy at Birth | 63.6 |
| Cognitively Disabled | 50.3 |
| Physically  Disabled | 14.3 |

| | |
|---|---|
| Heart Attack ER Admissions | 25.8 |
| Mental Health Not Good | 69.9 |
| Chronic Kidney Disease | 45.1 |
| Obesity | 76.5 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 51.8 |
| Stroke | 51.7 |
| Health Risk Behaviors | — |
| Binge Drinking | 89.1 |
| Current Smoker | 71.8 |
| No Leisure Time for Physical Activity | 41.3 |
| Climate Change Exposures | — |
| Wildfire Risk | 0.0 |
| SLR Inundation Area | 0.0 |
| Children | 68.4 |
| Elderly | 14.5 |
| English Speaking | 25.4 |
| Foreign-born | 90.0 |
| Outdoor Workers | 75.3 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 11.0 |
| Traffic Density | 92.2 |
| Traffic Access | 61.6 |
| Other Indices | — |
| Hardship | 56.0 |
| Other Decision Support | — |
| 2016 Voting | 18.3 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 92 |
| Healthy Places Index Score for Project Location (b) | 51 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | Yes |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | Wilmington Long Beach Carson |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

## 8.1. Justifications

| Screen | Justification |
|---|---|
| Land Use | Existing Uses |
| Construction: Construction Phases | High-Level Assumptions Based on Completion mid-2028. |
| Construction: Off-Road Equipment | Equipment lists populated based on experiential knowledge.<br>100 hp Roller = Compactor<br>175 hp Crawler Tractor = Gradall<br>300 hp Paving Equip = Concrete Truck PTO |
| Construction: Trips and VMT | High-Level Estimates based on Project Scale and Schedule. |
| Operations: Architectural Coatings | Repainting every 20 years. |

| | |
|---|---|
| Operations: Water and Waste Water | Existing uses to be renovated were estimated by scaling factor of 75.78 gal/sf/year based on the New City Hall. |

# Air Quality – Maximum Daily Construction Emissions

# CalEEMod Output - Maximum Daily Construction Emissions

| 3.1. Demolition (2026) - Unmitigated | | | | | | |
|---|---|---|---|---|---|---|
| Location | ROG | NOx | CO | $SO_2$ | PM10T | PM2.5T |
| Onsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Off-Road Equipment | 3.4 | 32 | 30 | 0.06 | 1.2 | 1.1 |
| Dust From Material Movement | | | | | 2.1 | 0.92 |
| Demolition | | | | | 0.44 | 0.07 |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | 0.37 | 0.04 |
| | | | | | | |
| Offsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Worker | 0.59 | 0.62 | 10 | 0 | 2.1 | 0.49 |
| Vendor | 0.005 | 0.14 | 0.07 | 0.005 | 0.04 | 0.01 |
| Hauling | 0.13 | 9.8 | 3.9 | 0.06 | 2.3 | 0.71 |
| | | | | | | |
| On | 3.4 | 32.1 | 30.1 | 0.1 | 4.2 | 2.2 |
| Off | 0.8 | 10.6 | 14.0 | 0.1 | 4.5 | 1.3 |
| Total | 4.2 | 42.7 | 44.1 | 0.2 | 8.7 | 3.5 |

| 3.3. Site Preparation (2026) - Unmitigated | | | | | | |
|---|---|---|---|---|---|---|
| Location | ROG | NOx | CO | $SO_2$ | PM10T | PM2.5T |
| Onsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Off-Road Equipment | 2.2 | 20 | 21 | 0.04 | 0.78 | 0.72 |
| Dust From Material Movement | | | | | 1.8 | 0.89 |
| Onsite truck | < 0.005 | 0.03 | 0.02 | < 0.005 | 0.56 | 0.06 |
| Daily, Winter (Max) | | | | | | |
| Off-Road Equipment | 2.2 | 20 | 21 | 0.04 | 0.78 | 0.72 |
| Dust From Material Movement | | | | | 1.8 | 0.89 |
| Onsite truck | < 0.005 | 0.04 | 0.02 | < 0.005 | 0.56 | 0.06 |
| | | | | | | |
| Offsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Worker | 0.59 | 0.62 | 10 | 0 | 2.1 | 0.49 |
| Vendor | 0.01 | 0.55 | 0.27 | 0.005 | 0.14 | 0.04 |
| Hauling | 0.17 | 13 | 5.2 | 0.07 | 3.1 | 0.95 |
| Daily, Winter (Max) | | | | | | |
| Worker | 0.59 | 0.7 | 8.8 | 0 | 2.1 | 0.49 |
| Vendor | 0.01 | 0.58 | 0.27 | 0.005 | 0.14 | 0.04 |
| Hauling | 0.16 | 14 | 5.2 | 0.07 | 3.1 | 0.95 |
| | | | | | | |
| On | 2.2 | 20.1 | 21.1 | 0.1 | 3.2 | 1.7 |
| Off | 0.8 | 15.3 | 14.3 | 0.1 | 5.4 | 1.5 |
| Total | 3.0 | 35.4 | 35.4 | 0.2 | 8.6 | 3.2 |

# CalEEMod Output - Maximum Daily Construction Emissions

| 3.5. Grading (2026) - Unmitigated | | | | | | |
|---|---|---|---|---|---|---|
| Location | ROG | NOx | CO | $SO_2$ | PM10T | PM2.5T |
| Onsite | | | | | | |
| Daily, Winter (Max) | | | | | | |
| Off-Road Equipment | 2.5 | 23 | 25 | 0.05 | 0.92 | 0.85 |
| Dust From Material Movement | | | | | 0.41 | 0.04 |
| Onsite truck | < 0.005 | 0.04 | 0.03 | < 0.005 | 1.1 | 0.11 |
| | | | | | | |
| Offsite | | | | | | |
| Daily, Winter (Max) | | | | | | |
| Worker | 0.73 | 0.87 | 11 | 0 | 2.6 | 0.61 |
| Vendor | 0.01 | 0.29 | 0.14 | 0.005 | 0.07 | 0.02 |
| Hauling | 0.24 | 20 | 7.8 | 0.11 | 4.7 | 1.4 |
| | | | | | | |
| On | 2.5 | 23.1 | 25.1 | 0.1 | 2.5 | 1.0 |
| Off | 1.0 | 21.2 | 19.0 | 0.2 | 7.4 | 2.1 |
| Total | 3.5 | 44.3 | 44.1 | 0.3 | 9.9 | 3.1 |

| 3.9. Building Construction (2027) - Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| Location | ROG | NOx | CO | $SO_2$ | PM10T | PM2.5T | $BCO_2$ |
| Onsite | | | | | | | |
| Daily, Summer (Max) | | | | | | | |
| Off-Road Equipment | 4.4 | 38 | 42 | 0.09 | 1.2 | 1.1 | |
| Dust From Material Movement | | | | | 0.41 | 0.04 | |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | 0.28 | 0.03 | |
| | | | | | | | |
| Offsite | | | | | | | |
| Daily, Summer (Max) | | | | | | | |
| Worker | 1.4 | 1.4 | 24 | 0 | 5.2 | 1.2 | |
| Vendor | 0.22 | 7.9 | 3.8 | 0.05 | 2.1 | 0.62 | |
| Hauling | 0.09 | 6.3 | 2.5 | 0.04 | 1.6 | 0.48 | |
| Daily, Winter (Max) | | | | | | | |
| Worker | 1.4 | 1.7 | 20 | 0 | 5.2 | 1.2 | |
| Vendor | 0.21 | 8.2 | 3.8 | 0.05 | 2.1 | 0.62 | |
| Hauling | 0.08 | 6.6 | 2.5 | 0.04 | 1.6 | 0.48 | |
| | | | | | | | |
| On | 4.4 | 38.1 | 42.1 | 0.1 | 1.9 | 1.2 | |
| Off | 1.7 | 16.5 | 30.3 | 0.1 | 8.9 | 2.3 | |
| Total | 6.1 | 54.6 | 72.4 | 0.2 | 10.8 | 3.5 | |

# CalEEMod Output - Maximum Daily Construction Emissions

| 3.13. Paving (2028) - Unmitigated | | | | | | |
|---|---|---|---|---|---|---|
| Location | ROG | NOx | CO | $SO_2$ | PM10T | PM2.5T |
| Onsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Off-Road Equipment | 2 | 17 | 23 | 0.05 | 0.59 | 0.55 |
| Dust From Material Movement | | | | | 0.28 | 0.03 |
| Paving | 0.03 | | | | | |
| Onsite truck | < 0.005 | 0.02 | 0.01 | < 0.005 | 0.19 | 0.02 |
| | | | | | | |
| Offsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Worker | 0.55 | 0.54 | 9 | 0 | 2.1 | 0.49 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.35 | 0.1 |
| Hauling | 0.01 | 0.61 | 0.24 | 0.005 | 0.16 | 0.05 |
| Daily, Winter (Max) | | | | | | |
| Worker | 0.54 | 0.62 | 7.7 | 0 | 2.1 | 0.49 |
| Vendor | 0.03 | 1.3 | 0.61 | 0.01 | 0.35 | 0.1 |
| Hauling | 0.01 | 0.64 | 0.25 | 0.005 | 0.16 | 0.05 |

| | | | | | | |
|---|---|---|---|---|---|---|
| On | 2.1 | 17.1 | 23.1 | 0.1 | 1.1 | 0.6 |
| Off | 0.6 | 2.6 | 9.9 | 0.1 | 2.7 | 0.7 |
| Total | 2.7 | 19.7 | 33.0 | 0.2 | 3.8 | 1.3 |

| 3.15. Architectural Coating (2028) - Unmitigated | | | | | | |
|---|---|---|---|---|---|---|
| Location | ROG | NOx | CO | $SO_2$ | PM10T | PM2.5T |
| Onsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Off-Road Equipment | 0.73 | 7.9 | 11 | 0.02 | 0.17 | 0.16 |
| Architectural Coatings | 59 | | | | | |
| Onsite truck | 0 | 0 | 0 | 0 | 0 | 0 |
| Offsite | | | | | | |
| Daily, Summer (Max) | | | | | | |
| Worker | 0.55 | 0.54 | 9 | 0 | 2.1 | 0.49 |
| Vendor | 0.06 | 2.5 | 1.2 | 0.02 | 0.7 | 0.21 |
| Hauling | 0.01 | 0.61 | 0.24 | 0.005 | 0.16 | 0.05 |
| Daily, Winter (Max) | | | | | | |
| Worker | 0.54 | 0.62 | 7.7 | 0 | 2.1 | 0.49 |
| Vendor | 0.05 | 2.6 | 1.2 | 0.02 | 0.7 | 0.21 |
| Hauling | 0.01 | 0.64 | 0.25 | 0.005 | 0.16 | 0.05 |

| | | | | | | |
|---|---|---|---|---|---|---|
| On | 59.8 | 7.9 | 11.0 | 0.1 | 0.2 | 0.2 |
| Off | 0.7 | 3.9 | 10.5 | 0.1 | 3.0 | 0.8 |
| Total | 60.5 | 11.8 | 21.5 | 0.2 | 3.2 | 1.0 |

# CalEEMod Output - Maximum Daily Construction Emissions

**Combined Phase Emissions**

| | | | | | | |
|---|---|---|---|---|---|---|
| D+SP | | | | | | |
| On | 5.6 | 52.2 | 51.2 | 0.2 | 7.4 | 3.9 |
| Off | 1.6 | 25.9 | 28.3 | 0.2 | 9.9 | 2.8 |
| Total | 7.2 | 78.1 | 79.5 | 0.4 | 17.3 | 6.7 |
| | | | | | | |
| G&E+BC | | | | | | |
| On | 6.9 | 61.2 | 67.2 | 0.2 | 4.4 | 2.2 |
| Off | 2.7 | 37.7 | 49.3 | 0.3 | 16.3 | 4.4 |
| Total | 9.6 | 98.9 | 116.5 | 0.5 | 20.7 | 6.6 |
| | | | | | | |
| BC+PV+AC | | | | | | |
| On | 66.3 | 63.1 | 76.2 | 0.3 | 3.2 | 2.0 |
| Off | 3.0 | 23.0 | 50.7 | 0.3 | 14.6 | 3.8 |
| Total | 69.3 | 86.1 | 126.9 | 0.6 | 17.8 | 5.8 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Max Regional | 69.3 | 98.9 | 126.9 | 0.6 | 20.7 | 6.7 |
| Max Localized | 66.3 | 63.1 | 76.2 | 0.3 | 7.4 | 3.9 |
| SRA 4 LST Screening Values | 2-acre | 82 | 842 | | 7 | 5 |
| | 3-acre | 95 | 1071 | | 9 | 6 |
| | 5-acre | 123 | 1530 | | 14 | 8 |

# GHG Emissions – Total Construction Emissions

# Total Construction GHG Emissions Calculations Using CalEEMod Output

| 3. Construction Emissions Details | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| 3.1. Demolition (2026) - Unmitigated | | | | | | | | |
| | Annual | $BCO_2$ | $NBCO_2$ | $CO_2T$ | $CH_4$ | $N_2O$ | R | $CO_2e$ |
| | Off-Road Equipment | | 177 | 177 | 0.01 | < 0.005 | | 177.00 |
| | Dust From Material Movement | | | | | | | |
| | Demolition | | | | | | | |
| | Onsite truck | | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62.00 |
| | Vendor | | 3.7 | 3.7 | < 0.005 | < 0.005 | < 0.005 | 3.80 |
| | Hauling | | 241 | 241 | 0.01 | 0.04 | 0.23 | 253.00 |

| 3.3. Site Preparation (2026) - Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Annual | | | | | | |
| | Off-Road Equipment | | 121 | 121 | < 0.005 | < 0.005 | | 121.00 |
| | Dust From Material Movement | | | | | | | |
| | Onsite truck | | 0.29 | 0.29 | < 0.005 | < 0.005 | < 0.005 | 0.31 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 61 | 61 | < 0.005 | < 0.005 | 0.09 | 62.00 |
| | Vendor | | 15 | 15 | < 0.005 | < 0.005 | 0.02 | 15.00 |
| | Hauling | | 321 | 321 | 0.02 | 0.05 | 0.31 | 337.00 |

| 3.5. Grading (2026) - Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Annual | | | | | | |
| | Off-Road Equipment | | 93 | 93 | < 0.005 | < 0.005 | | 94.00 |
| | Dust From Material Movement | | | | | | | |
| | Onsite truck | | 0.32 | 0.32 | < 0.005 | < 0.005 | < 0.005 | 0.34 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 51 | 51 | < 0.005 | < 0.005 | 0.08 | 51.00 |
| | Vendor | | 4.8 | 4.8 | < 0.005 | < 0.005 | 0.01 | 5.10 |
| | Hauling | | 317 | 317 | 0.02 | 0.05 | 0.31 | 333.00 |

| 3.7. Grading (2027) - Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Annual | | | | | | |
| | Off-Road Equipment | | 187 | 187 | 0.01 | < 0.005 | | 187.00 |
| | Dust From Material Movement | | | | | | | |
| | Onsite truck | | 0.63 | 0.63 | < 0.005 | < 0.005 | < 0.005 | 0.67 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 99 | 99 | < 0.005 | < 0.005 | 0.14 | 101.00 |
| | Vendor | | 9.5 | 9.5 | < 0.005 | < 0.005 | 0.01 | 9.90 |
| | Hauling | | 622 | 622 | 0.03 | 0.1 | 0.57 | 654.00 |

# Total Construction GHG Emissions Calculations Using CalEEMod Output

| 3.9. Building Construction (2027) - Unmitigated | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Annual | | | | | | | |
| | Off-Road Equipment | | 890 | 890 | 0.04 | 0.01 | | 893.00 |
| | Dust From Material Movement | | | | | | | |
| | Onsite truck | | 0.53 | 0.53 | < 0.005 | < 0.005 | < 0.005 | 0.56 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 553 | 553 | 0.01 | 0.02 | 0.77 | 560.00 |
| | Vendor | | 794 | 794 | 0.03 | 0.11 | 0.89 | 829.00 |
| | Hauling | | 577 | 577 | 0.03 | 0.09 | 0.53 | 607.00 |

| 3.11. Building Construction (2028) - Unmitigated | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Annual | | | | | | | |
| | Off-Road Equipment | | 410 | 410 | 0.02 | < 0.005 | | 412.00 |
| | Dust From Material Movement | | | | | | | |
| | Onsite truck | | 0.24 | 0.24 | < 0.005 | < 0.005 | < 0.005 | 0.25 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 251 | 251 | < 0.005 | 0.01 | 0.32 | 254.00 |
| | Vendor | | 358 | 358 | 0.01 | 0.05 | 0.39 | 373.00 |
| | Hauling | | 260 | 260 | 0.01 | 0.04 | 0.23 | 273.00 |

| 3.13. Paving (2028) - Unmitigated | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Annual | | | | | | | |
| | Off-Road Equipment | | 162 | 162 | 0.01 | < 0.005 | | 163.00 |
| | Dust From Material Movement | | | | | | | |
| | Paving | | | | | | | |
| | Onsite truck | | 0.14 | 0.14 | < 0.005 | < 0.005 | < 0.005 | 0.15 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 59 | 59 | < 0.005 | < 0.005 | 0.08 | 60.00 |
| | Vendor | | 35 | 35 | < 0.005 | < 0.005 | 0.04 | 37.00 |
| | Hauling | | 15 | 15 | < 0.005 | < 0.005 | 0.01 | 16.00 |

| 3.15. Architectural Coating (2028) - Unmitigated | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Annual | | | | | | | |
| | Off-Road Equipment | | 107 | 107 | < 0.005 | < 0.005 | | 108.00 |
| | Architectural Coatings | | | | | | | |
| | Onsite truck | | 0 | 0 | 0 | 0 | 0 | 0.00 |
| | | | | | | | | |
| | Annual | | | | | | | |
| | Worker | | 118 | 118 | < 0.005 | < 0.005 | 0.15 | 120.00 |
| | Vendor | | 141 | 141 | 0.01 | 0.02 | 0.15 | 147.00 |
| | Hauling | | 31 | 31 | < 0.005 | < 0.005 | 0.03 | 32.00 |

| | |
|---|---|
| Off-Road Equipment | 2155.0 |
| Onsite truck | 2.6 |
| Worker | 1270.0 |
| Vendor | 1064.9 |
| Hauling | 1878.8 |
| | |
| Total MTCO2e | 6371.19 |
| Amortized MTCO2e | 212.373 |

# Annual GHG Emissions – Proposed Plan (2050)

**Proposed Plan**

| 2.5. Operations Emissions by Sector, Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sector | $BCO_2$ | $NBCO_2$ | $CO_2T$ | $CH_4$ | $N_2O$ | R | $CO_2e$ |
| Annual | | | | | | | 210.4 |
| Area | | 31.0 | 31.0 | < 0.005 | < 0.005 | | 32.0 |
| Energy | | 3,051.0 | 3,051.0 | 0.3 | 0.0 | | 1,403.0 |
| Water | 23.0 | 61.0 | 84.0 | 2.4 | 0.1 | | |
| Waste | 235.0 | 0.0 | 235.0 | 23.0 | 0.0 | | 822.0 |
| Refrig. | | | | | | 65.0 | 65.0 |
| Off-Road | | 108.0 | 108.0 | < 0.005 | < 0.005 | | 108.0 |
| Total | 258.0 | 3,251.0 | 3,509.0 | 26.0 | 0.1 | 65.0 | 4,254.0 |
| | | | | | | On-Site Total | 2,640.4 |
| | | | | | | Citywide Mobile | 225,268.0 |
| | | | | | | Existing Mobile | 333,651.0 |
| | | | | | | Net Mobile | -108,383.0 |
| | | | | | | Net Total | -105,742.6 |

# Annual GHG Emissions – Entertainment Retail (2050)

**E/R Option**

| 2.5. Operations Emissions by Sector, Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sector | $BCO_2$ | $NBCO_2$ | $CO_2T$ | $CH_4$ | $N_2O$ | R | $CO_2e$ |
| Annual | | | | | | | |
| Area | | 36.0 | 36.0 | < 0.005 | < 0.005 | | 36.0 |
| Energy | | 2,959.0 | 2,959.0 | 0.3 | 0.0 | | 1,293.0 |
| Water | 32.0 | 83.0 | 115.0 | 3.3 | 0.1 | | |
| Waste | 263.0 | 0.0 | 263.0 | 26.0 | 0.0 | | 920.0 |
| Refrig. | | | | | | 11.0 | 11.0 |
| Off-Road | | 108.0 | 108.0 | < 0.005 | < 0.005 | | 108.0 |
| Total | 295.0 | 3,186.0 | 3,481.0 | 30.0 | 0.1 | 11.0 | 4,272.0 |
| | | | | | | On-Site Total | 2,368.0 |
| | | | | | | Citywide Mobile | 225,619.0 |
| | | | | | | Existing Mobile | 333,651.0 |
| | | | | | | Net Mobile | -108,032.0 |
| | | | | | | Total | -105,453.6 |

# Annual GHG Emissions – Existing Conditions

**Existing Conditions**

| 2.5. Operations Emissions by Sector, Unmitigated | | | | | | | |
|---|---|---|---|---|---|---|---|
| Sector | $BCO_2$ | $NBCO_2$ | $CO_2T$ | $CH_4$ | $N_2O$ | R | $CO_2e$ |
| Annual | | | | | | | |
| Mobile | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Area | | 3.1 | 3.1 | < 0.005 | < 0.005 | | 3.1 |
| Energy | | 681.0 | 681.0 | 0.1 | 0.0 | | 685.0 |
| Water | 7.9 | 28.0 | 36.0 | 0.8 | 0.0 | | 62.0 |
| Waste | 78.0 | 0.0 | 78.0 | 7.8 | 0.0 | | 274.0 |
| Refrig. | | | | | | 0.1 | 0.1 |
| Total | 86.0 | 713.0 | 799.0 | 8.7 | 0.0 | 0.1 | 1,024.0 |
| | | | | | | On-Site Total | 2,049.0 |
| | | | | | | Citywide Mobile | 333,651.0 |
| | | | | | | | |
| | | | | | | Total | 335,700.0 |

# EMFAC2021 Operational Mobile Source Emissions

# Mobile Source Emissions Calculations

**Carson Civic Center VMT Summary**
**(Preferred Plan & Alternative Scenario)**

| Scenario (Area) | Total Home-based Daily VMT | Total Work-based Daily VMT | Total Daily VMT | Service Population | VMT / Service | VMT/SP Threshold | Exhaust MTCO2e/year | Electricity MTCO2e/yea | Combined |
|---|---|---|---|---|---|---|---|---|---|
| Existing (City of Carson) | 1,543,781 | 947,055 | 2,490,836 | 160,708 | 15.5 | 13.18 | 331,488.2 | 2,162.8 | 333,651.0 |
| Existing Plus Project (City of Carson) - Preferred | 1,532,293 | 936,792 | 2,469,084 | 162,037 | 15.24 | | 328,593.3 | 2,143.9 | 330,738.0 |
| Existing Plus Project (City of Carson) - Alt Scenario | 1,535,625 | 937,170 | 2,472,796 | 162,223 | 15.24 | | 329,087.3 | 2,147.1 | 331,235.0 |
| Future 2050 Without Project (City of Carson) | 1,403,904 | 736,700 | 2,140,604 | 168,996 | 12.67 | 10.77 | 224,696 | | |
| Future 2050 With Project (City of Carson) - Preferred | 1,400,594 | 745,455 | 2,146,049 | 170,325 | 12.6 | | 225,268 | | |
| Future 2050 With Project (City of Carson) - Alt Scenario | 1,403,640 | 745,756 | 2,149,396 | 170,511 | 12.61 | | 225,619 | | |

| CO2e (lb/MWh) |
|---|
| 350.654 |

| | ROG_TOTAL | NOx_TOTEX | CO_TOTEX | SOx_TOTEX | PM10_TOTAL | PM2.5_TOTAL | CO2_TOTEX | CH4_TOTEX | N2O_TOTEX | CO2e_total | Energy Consumption |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | kWh/mile |
| 2024 | 0.000293743 | 0.000440142 | 0.002853203 | 8.13087E-06 | 5.61078E-05 | 2.11871E-05 | 0.832059156 | 3.1981E-05 | 4.2509E-05 | 0.84552637 | 0.015732347 |
| | | | | | | | | | | | |
| Existing (City of Carson) | 731.7 | 1,096.3 | 7,106.9 | 20.3 | 139.8 | 52.8 | 2,072,522.9 | 79.7 | 105.9 | 2,106,067.5 | 39,186.7 |
| Existing Plus Project (City of Carson) - Preferred | 725.3 | 1,086.7 | 7,044.8 | 20.1 | 138.5 | 52.3 | 2,054,423.9 | 79.0 | 105.0 | 2,087,675.6 | 38,844.5 |
| Existing Plus Project (City of Carson) - Alt Scenario | 726.4 | 1,088.4 | 7,055.4 | 20.1 | 138.7 | 52.4 | 2,057,512.6 | 79.1 | 105.1 | 2,090,814.2 | 38,902.9 |

| CO2e (lb/MWh) |
|---|
| 0.000 |

| | ROG_TOTAL | NOx_TOTEX | CO_TOTEX | SOx_TOTEX | PM10_TOTAL | PM2.5_TOTAL | CO2_TOTEX | CH4_TOTEX | N2O_TOTEX | CO2e_total | Energy Consumption |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | lb/mi | kWh/mile |
| 2050 | 0.000139673 | 0.000262 | 0.001517814 | 6.32544E-06 | 5.7914E-05 | 2.03255E-05 | 0.648885692 | 4.50428E-05 | 5.66828E-05 | 0.666903235 | 0.067512496 |
| | | | | | | | | | | | |
| Future 2050 Without Project (City of Carson) | 299.0 | 560.8 | 3,249.0 | 13.5 | 124.0 | 43.5 | 1,389,007.3 | 96.4 | 121.3 | 1,427,575.7 | 144,517.5 |
| Future 2050 With Project (City of Carson) - Preferred | 299.7 | 562.3 | 3,257.3 | 13.6 | 124.3 | 43.6 | 1,392,540.5 | 96.7 | 121.6 | 1,431,207.0 | 144,885.1 |
| Future 2050 With Project (City of Carson) - Alt Scenario | 300.2 | 563.1 | 3,262.4 | 13.6 | 124.5 | 43.7 | 1,394,712.3 | 96.8 | 121.8 | 1,433,439.1 | 145,111.1 |

# EMFAC2021 Mobile Source Emisisons Inventory - 2024 and 2050

Source: EMFAC2021 (v1.0.2) Emissions Inventory
Region Type: Sub-Area
Region: Los Angeles (SC)
Calendar Year: 2024, 2050
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Gasoline and Diesel Fuel Consumption, 1000 diesel equivalent gallons/day for Natural Gas Fuel Consumption, kWh/day for Energy Consumption

| Region | Calendar Y | Vehicle Ca | Model Yea | Speed | Fuel | Population | Total VMT | Trips | Energy Consumption | ROG_TOTAL | NOx_TOTEX | CO_TOTEX | SOx_TOTEX | PM10_Total_Calc | PM2.5_Total_Calc | CO2_TOTEX | CH4_TOTEX | N2O_TOTEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angele | 2024 | HHDT | Aggregate | Aggregate | Gasoline | 43.66381395 | 2950.780026 | 873.6255896 | 0 | 0.0040015 | 0.02297717 | 0.14498486 | 0.00006832 | 0.00038 | 0.00013 | 6.91055 | 0.00049 | 0.00066 |
| Los Angele | 2024 | HHDT | Aggregate | Aggregate | Diesel | 52323.86623 | 6605322.598 | 812033.7494 | 0 | 0.40709 | 19.60527 | 5.07152 | 0.11599 | 1.0267 | 0.44271 | 12,248.82 | 0.01891 | 1.92981 |
| Los Angele | 2024 | HHDT | Aggregate | Aggregate | Electricity | 159.3276671 | 16508.79771 | 2224.439713 | 29382.84494 | 0 | 0 | 0 | 0 | 0.00138 | 0.00042 | 0 | 0 | 0 |
| Los Angele | 2024 | HHDT | Aggregate | Aggregate | Natural Ga | 5707.00382 | 363944.8425 | 36370.01118 | 0 | 0.01742 | 0.39081 | 3.7059 | 0 | 0.07767 | 0.02637 | 538.30524 | 0.69536 | 0.10974 |
| Los Angele | 2024 | LDA | Aggregate | Aggregate | Gasoline | 3312060.357 | 130838318.3 | 15395682 | 0 | 17.83436 | 10.41425 | 169.6581 | 0.42303 | 2.6769 | 0.968 | 42,790.75 | 1.57458 | 1.23721 |
| Los Angele | 2024 | LDA | Aggregate | Aggregate | Diesel | 8789.19002 | 256968.192 | 36035.14021 | 0 | 0.01256 | 0.0686 | 0.13101 | 0.00068 | 0.01286 | 0.00917 | 71.76374 | 0.00058 | 0.01131 |
| Los Angele | 2024 | LDA | Aggregate | Aggregate | Electricity | 171677.6521 | 8196290.291 | 857942.877 | 3164444.529 | 0 | 0 | 0 | 0 | 0.11175 | 0.03188 | 0 | 0 | 0 |
| Los Angele | 2024 | LDA | Aggregate | Aggregate | Plug-in Hyb | 91933.06913 | 4279571.308 | 380143.2408 | 656617.5343 | 0.15649 | 0.06281 | 1.66472 | 0.00721 | 0.06178 | 0.02042 | 728.82655 | 0.0194 | 0.01146 |
| Los Angele | 2024 | LDT1 | Aggregate | Aggregate | Gasoline | 311828.9204 | 11357946.66 | 1373845.457 | 0 | 3.74496 | 2.87056 | 33.25464 | 0.04398 | 0.27346 | 0.1071 | 4,448.94 | 0.29607 | 0.21407 |
| Los Angele | 2024 | LDT1 | Aggregate | Aggregate | Diesel | 118.5293676 | 2368.568506 | 338.8223403 | 0 | 0.00086 | 0.00395 | 0.00467 | 0.00001 | 0.00075 | 0.00068 | 1.15199 | 0.00004 | 0.00018 |
| Los Angele | 2024 | LDT1 | Aggregate | Aggregate | Electricity | 868.5158405 | 34958.66479 | 4075.933908 | 13496.9299 | 0 | 0 | 0 | 0 | 0.00048 | 0.00014 | 0 | 0 | 0 |
| Los Angele | 2024 | LDT1 | Aggregate | Aggregate | Plug-in Hyb | 472.0350753 | 24183.9963 | 1951.865036 | 4046.83145 | 0.00064 | 0.00032 | 0.00855 | 0.00004 | 0.00034 | 0.00011 | 3.74678 | 0.0001 | 0.00006 |
| Los Angele | 2024 | LDT2 | Aggregate | Aggregate | Gasoline | 1566130.15 | 64695889.13 | 7373137.581 | 0 | 8.88152 | 8.07831 | 96.47495 | 0.25553 | 1.43805 | 0.52041 | 25,847.16 | 0.90655 | 0.75187 |
| Los Angele | 2024 | LDT2 | Aggregate | Aggregate | Diesel | 4948.489318 | 214828.9903 | 23893.23295 | 0 | 0.00445 | 0.01164 | 0.04139 | 0.00072 | 0.00567 | 0.00263 | 76.46796 | 0.00021 | 0.01205 |
| Los Angele | 2024 | LDT2 | Aggregate | Aggregate | Electricity | 10499.25109 | 385269.4446 | 53700.22067 | 148745.8036 | 0 | 0 | 0 | 0 | 0.00525 | 0.0015 | 0 | 0 | 0 |
| Los Angele | 2024 | LDT2 | Aggregate | Aggregate | Plug-in Hyb | 13716.62465 | 676714.4758 | 56718.24293 | 109322.9308 | 0.01934 | 0.00938 | 0.24906 | 0.00108 | 0.0096 | 0.00307 | 109.66846 | 0.0029 | 0.00171 |
| Los Angele | 2024 | LHDT1 | Aggregate | Aggregate | Gasoline | 123836.5988 | 4934814.469 | 1844980.806 | 0 | 1.57029 | 2.14232 | 12.69474 | 0.03423 | 0.47505 | 0.16603 | 3,462.56 | 0.11263 | 0.15321 |
| Los Angele | 2024 | LHDT1 | Aggregate | Aggregate | Diesel | 55652.48261 | 2469363.403 | 700038.2204 | 0 | 0.25194 | 3.19725 | 0.71218 | 0.01282 | 0.30276 | 0.13775 | 1,352.70 | 0.0117 | 0.21312 |
| Los Angele | 2024 | LHDT1 | Aggregate | Aggregate | Electricity | 510.884395 | 38629.84069 | 7136.731466 | 21582.07468 | 0 | 0 | 0 | 0 | 0.002 | 0.00067 | 0 | 0 | 0 |
| Los Angele | 2024 | LHDT2 | Aggregate | Aggregate | Gasoline | 18962.98073 | 709989.1461 | 282520.1581 | 0 | 0.22985 | 0.32449 | 1.6572 | 0.00564 | 0.0784 | 0.02734 | 570.99068 | 0.01575 | 0.02336 |
| Los Angele | 2024 | LHDT2 | Aggregate | Aggregate | Diesel | 25083.1257 | 1093295.739 | 315514.1668 | 0 | 0.111 | 1.25764 | 0.28919 | 0.00673 | 0.14973 | 0.06649 | 710.29613 | 0.00516 | 0.11191 |
| Los Angele | 2024 | LHDT2 | Aggregate | Aggregate | Electricity | 132.2328573 | 9473.403689 | 1750.362491 | 5296.526189 | 0 | 0 | 0 | 0 | 0.00056 | 0.00019 | 0 | 0 | 0 |
| Los Angele | 2024 | MDV | Aggregate | Aggregate | Gasoline | 941104.6897 | 35897503.31 | 4364748.435 | 0 | 7.14373 | 6.9834 | 65.93664 | 0.17415 | 0.81134 | 0.29506 | 17,616.02 | 0.7019 | 0.55131 |
| Los Angele | 2024 | MDV | Aggregate | Aggregate | Diesel | 10836.3418 | 423746.7965 | 51125.4825 | 0 | 0.00872 | 0.04621 | 0.13897 | 0.00191 | 0.01272 | 0.00654 | 201.56564 | 0.0004 | 0.03176 |
| Los Angele | 2024 | MDV | Aggregate | Aggregate | Electricity | 11444.7591 | 420107.4512 | 58543.45266 | 162196.1495 | 0 | 0 | 0 | 0 | 0.00572 | 0.00163 | 0 | 0 | 0 |
| Los Angele | 2024 | MDV | Aggregate | Aggregate | Plug-in Hyb | 7947.75957 | 357372.4851 | 32863.98582 | 56841.1787 | 0.01165 | 0.00533 | 0.13704 | 0.00059 | 0.00513 | 0.00168 | 59.78204 | 0.00165 | 0.00096 |
| Los Angele | 2024 | MHDT | Aggregate | Aggregate | Gasoline | 14716.96009 | 800329.4685 | 294456.9375 | 0 | 0.29607 | 0.51886 | 3.27511 | 0.01456 | 0.05009 | 0.01708 | 1,472.62 | 0.02983 | 0.02993 |
| Los Angele | 2024 | MHDT | Aggregate | Aggregate | Diesel | 59315.44342 | 2506987.886 | 726825.573 | 0 | 0.07382 | 5.08039 | 0.72815 | 0.02986 | 0.19008 | 0.08525 | 3,153.77 | 0.00343 | 0.49688 |
| Los Angele | 2024 | MHDT | Aggregate | Aggregate | Electricity | 193.0645447 | 11118.76621 | 2643.907442 | 11626.17241 | 0 | 0 | 0 | 0 | 0.00041 | 0.00013 | 0 | 0 | 0 |
| Los Angele | 2024 | MHDT | Aggregate | Aggregate | Natural Ga | 877.2928396 | 42058.48817 | 7503.189916 | 0 | 0.00061 | 0.01168 | 0.14123 | 0 | 0.00263 | 0.0009 | 44.79231 | 0.04241 | 0.00913 |

# EMFAC2021 Mobile Source Emisisons Inventory - 2024 and 2050

| Region | Calendar Y | Vehicle Ca | Model Yea | Speed | Fuel | Population | Total VMT | Trips | Energy Consumption | ROG_TOTAL | NOx_TOTEX | CO_TOTEX | SOx_TOTEX | PM10_Total_Calc | PM2.5_Total_Calc | CO2_TOTEX | CH4_TOTEX | N2O_TOTEX |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Los Angele | 2050 | HHDT | Aggregate | Aggregate | Gasoline | 8.382095263 | 993.1309355 | 167.708962 | 0 | 0.00038 | 0.00284 | 0.02978 | 0.00002 | 0.00012 | 0.00004 | 1.767 | 0.00007 | 0.00012 |
| Los Angele | 2050 | HHDT | Aggregate | Aggregate | Diesel | 77008.67539 | 10818904.51 | 1309793.911 | 0 | 0.65159 | 23.10414 | 8.40289 | 0.15151 | 1.73595 | 0.73429 | 15,999.43 | 0.03026 | 2.52072 |
| Los Angele | 2050 | HHDT | Aggregate | Aggregate | Electricity | 25001.41232 | 2223528.964 | 302938.1536 | 3982732.733 | 0 | 0 | 0 | 0 | 0.19525 | 0.05993 | 0 | 0 | 0 |
| Los Angele | 2050 | HHDT | Aggregate | Aggregate | Natural Ga | 6012.540628 | 374233.2948 | 45237.77559 | 0 | 0.0061 | 0.12241 | 2.45906 | 0 | 0.07198 | 0.02419 | 486.39285 | 0.42308 | 0.09915 |
| Los Angele | 2050 | LDA | Aggregate | Aggregate | Gasoline | 2791705.317 | 104008494.8 | 13046536.73 | 0 | 7.27392 | 4.37146 | 79.70273 | 0.2703 | 1.99405 | 0.64933 | 27,341.49 | 0.5541 | 0.70861 |
| Los Angele | 2050 | LDA | Aggregate | Aggregate | Diesel | 1705.366561 | 60242.50841 | 7780.27256 | 0 | 0.00037 | 0.0007 | 0.01181 | 0.00012 | 0.00117 | 0.00039 | 12.63922 | 0.00002 | 0.00199 |
| Los Angele | 2050 | LDA | Aggregate | Aggregate | Electricity | 388137.8708 | 14854702.46 | 1826786.992 | 5735141.176 | 0 | 0 | 0 | 0 | 0.20289 | 0.05791 | 0 | 0 | 0 |
| Los Angele | 2050 | LDA | Aggregate | Aggregate | Plug-in Hyb | 131601.907 | 4949652.738 | 544173.8854 | 885968.6396 | 0.3007 | 0.0823 | 1.84105 | 0.00698 | 0.06831 | 0.02054 | 705.71412 | 0.02525 | 0.0136 |
| Los Angele | 2050 | LDT1 | Aggregate | Aggregate | Gasoline | 257677.7091 | 9095512.819 | 1165593.215 | 0 | 0.92383 | 0.42637 | 7.56204 | 0.02734 | 0.19447 | 0.06412 | 2,765.67 | 0.05285 | 0.06698 |
| Los Angele | 2050 | LDT1 | Aggregate | Aggregate | Diesel | 2.990084566 | 108.1380231 | 13.76245331 | 0 | 0 | 0 | 0.00002 | 0 | 0 | 0 | 0.04252 | 0 | 0.00001 |
| Los Angele | 2050 | LDT1 | Aggregate | Aggregate | Electricity | 8050.96012 | 297361.7144 | 37455.78287 | 114806.1643 | 0 | 0 | 0 | 0 | 0.00406 | 0.00116 | 0 | 0 | 0 |
| Los Angele | 2050 | LDT1 | Aggregate | Aggregate | Plug-in Hyb | 6126.728584 | 225340.0677 | 25334.0227 | 40364.64351 | 0.01486 | 0.00381 | 0.0845 | 0.00032 | 0.00311 | 0.00094 | 32.35344 | 0.00117 | 0.00063 |
| Los Angele | 2050 | LDT2 | Aggregate | Aggregate | Gasoline | 1909056.362 | 70496461.88 | 8858901.784 | 0 | 5.72591 | 3.57439 | 65.67964 | 0.21975 | 1.49126 | 0.48967 | 22,228.37 | 0.49117 | 0.54954 |
| Los Angele | 2050 | LDT2 | Aggregate | Aggregate | Diesel | 7301.688637 | 270074.1544 | 33932.89685 | 0 | 0.00518 | 0.0096 | 0.05433 | 0.00074 | 0.00686 | 0.00299 | 78.58728 | 0.00024 | 0.01238 |
| Los Angele | 2050 | LDT2 | Aggregate | Aggregate | Electricity | 78442.89641 | 2059273.028 | 368340.2341 | 795049.3499 | 0 | 0 | 0 | 0 | 0.02814 | 0.00803 | 0 | 0 | 0 |
| Los Angele | 2050 | LDT2 | Aggregate | Aggregate | Plug-in Hyb | 53148.95754 | 1964573.761 | 219770.9394 | 351706.4848 | 0.11914 | 0.03313 | 0.73565 | 0.0028 | 0.02712 | 0.00815 | 282.9929 | 0.01017 | 0.00546 |
| Los Angele | 2050 | LHDT1 | Aggregate | Aggregate | Gasoline | 77862.85822 | 2728819.03 | 1160040.572 | 0 | 0.56707 | 0.51273 | 6.04972 | 0.01539 | 0.26204 | 0.09122 | 1,556.75 | 0.03156 | 0.05195 |
| Los Angele | 2050 | LHDT1 | Aggregate | Aggregate | Diesel | 61183.6605 | 2057479.093 | 769613.48 | 0 | 0.10762 | 0.38421 | 0.25525 | 0.01011 | 0.23147 | 0.09489 | 1,067.27 | 0.005 | 0.16815 |
| Los Angele | 2050 | LHDT1 | Aggregate | Aggregate | Electricity | 118780.889 | 4733034.146 | 1652867.332 | 2654836.222 | 0 | 0 | 0 | 0 | 0.24521 | 0.08165 | 0 | 0 | 0 |
| Los Angele | 2050 | LHDT2 | Aggregate | Aggregate | Gasoline | 11213.67796 | 370486.5465 | 167067.0932 | 0 | 0.08707 | 0.06469 | 0.86221 | 0.00235 | 0.04089 | 0.01424 | 238.00546 | 0.00392 | 0.00674 |
| Los Angele | 2050 | LHDT2 | Aggregate | Aggregate | Diesel | 29661.37473 | 957881.7812 | 373102.78 | 0 | 0.06007 | 0.23338 | 0.14048 | 0.0055 | 0.12425 | 0.05162 | 580.6152 | 0.00279 | 0.09148 |
| Los Angele | 2050 | LHDT2 | Aggregate | Aggregate | Electricity | 32748.55229 | 1249736.006 | 433246.4051 | 701368.8455 | 0 | 0 | 0 | 0 | 0.0737 | 0.02469 | 0 | 0 | 0 |
| Los Angele | 2050 | MDV | Aggregate | Aggregate | Gasoline | 1106051.265 | 38531531.55 | 5100841.059 | 0 | 3.59033 | 2.10442 | 37.59497 | 0.14573 | 0.82412 | 0.27105 | 14,741.04 | 0.28454 | 0.31605 |
| Los Angele | 2050 | MDV | Aggregate | Aggregate | Diesel | 11986.41891 | 415776.6825 | 55134.59112 | 0 | 0.00276 | 0.00515 | 0.09039 | 0.00149 | 0.00902 | 0.00306 | 156.7576 | 0.00013 | 0.0247 |
| Los Angele | 2050 | MDV | Aggregate | Aggregate | Electricity | 72219.58254 | 1866962.628 | 337193.9881 | 720801.6631 | 0 | 0 | 0 | 0 | 0.02552 | 0.00729 | 0 | 0 | 0 |
| Los Angele | 2050 | MDV | Aggregate | Aggregate | Plug-in Hyb | 33944.2419 | 1179011.971 | 140359.4403 | 211024.3783 | 0.08151 | 0.02092 | 0.45311 | 0.00171 | 0.0163 | 0.00491 | 172.73735 | 0.00641 | 0.0034 |
| Los Angele | 2050 | MHDT | Aggregate | Aggregate | Gasoline | 5956.885207 | 285814.4879 | 119185.3592 | 0 | 0.07752 | 0.08235 | 0.53705 | 0.00443 | 0.0179 | 0.00613 | 447.91504 | 0.00727 | 0.00682 |
| Los Angele | 2050 | MHDT | Aggregate | Aggregate | Diesel | 50251.02068 | 2078688.2 | 627720.8379 | 0 | 0.02097 | 1.65061 | 0.49515 | 0.02185 | 0.13555 | 0.04974 | 2,307.12 | 0.00097 | 0.36349 |
| Los Angele | 2050 | MHDT | Aggregate | Aggregate | Electricity | 62340.19508 | 2711686.143 | 824766.2281 | 2844504.87 | 0 | 0 | 0 | 0 | 0.10096 | 0.03175 | 0 | 0 | 0 |
| Los Angele | 2050 | MHDT | Aggregate | Aggregate | Natural Ga | 973.4238716 | 39653.70929 | 9019.588904 | 0 | 0.00059 | 0.00913 | 0.13968 | 0 | 0.0025 | 0.00087 | 40.96147 | 0.04137 | 0.00835 |

| | Electricity (kWh/mi) | ROG_TOTAL | NOx_TOTEX | CO_TOTEX | SOx_TOTEX | PM10_TOTAL | PM2.5_TOTAL | CO2 | CH4 | N2O |
|---|---|---|---|---|---|---|---|---|---|---|
| 2024 | 0.015787264 | 0.000293743 | 0.000440142 | 0.002853203 | 8.13E-06 | 5.61E-05 | 2.12E-05 | 0.832059156 | 3.20E-05 | 4.25E-05 |
| 2050 | 0.067774643 | 0.000139673 | 0.000262 | 0.001517814 | 6.33E-06 | 5.79E-05 | 2.03E-05 | 0.64964522 | 1.40E-05 | 3.57E-05 |

# Appendix B

## Noise Monitoring Session Report and Noise Calculations

# Noise and Vibration Calculations

**Noise Formulas**

**Noise Distance Attenuation**

**Hard Site**

**Ni = No - 20 * LOG(Di/Do)**

**Ni** = attenuated noise level of interest
**No** = reference noise level
**Di** = distance to receptor (Di>Do)
**Do** = reference distance

**Source:** (Bolt, Beranek, and Newman, 1971)

**Summation of Noise Levels**

**Equation:** Ns=10 x LOG10((10^(N1/10))+(10^(N2/10))+(10^(N3/10))+(10^(N4/10)))

Ns = Noise Level Sum
N1 = Noise Level 1
N2 = Noise Level 2
N3 = Noise Level 3
N4 = Noise Level 4
=10*LOG(SUM(10^(UserRange/10)))
**Source:** California Department of Transportation, Technical Noise Supplement, 2013

| **CONSTRUCTION NOISE LEVEL BY PHASE** | |
|---|---|
| **Noise Source** | **Noise Level (dBA) $L_{eq}$ at 50 Feet /a/** |
| **DEMOLITION AND CLEARING** | |
| Backhoe | 68.6 |
| Compressor (air) | 73.7 |
| Concrete Saw | 82.6 |
| Dozer | 72.7 |
| Excavator | 71.7 |
| Gradall | 74.4 |
| Generator | 77.6 |
| **Demolition and Clearing Combined Noise Level** | 85.2 |
| **SITE PREPARATION** | |
| Auger Drill Rig | 72.4 |
| Excavator | 71.7 |
| Backhoe | 68.6 |
| Compressor (air) | 73.7 |
| Generator | 77.6 |
| Dozer | 72.7 |
| **Excavation and Shoring Combined Noise Level** | 81.4 |
| **GRADING** | |
| Backhoe | 68.6 |
| Excavator | 71.7 |
| Grader | 76.0 |
| Roller | 68.0 |
| Dozer | 72.7 |
| Compactor (ground) | 71.2 |
| Generator | 77.6 |
| Compressor (air) | 73.7 |
| **Grading and Combined Noise Level** | 82.6 |
| **BUILDING CONSTRUCTION** | |
| Auger Drill Rig | 72.4 |
| Backhoe | 68.6 |
| Crane | 67.6 |
| Excavator | 71.7 |
| Gradall | 74.4 |
| Concrete Mixer Truck | 69.8 |
| Compactor (ground) | 71.2 |
| Generator | 77.6 |
| Compressor (air) | 73.7 |
| Welder/torch | 70.0 |
| **Building Construction Combined Noise Level** | 82.7 |
| **ARCHITECTURAL COATING** | |
| Compressor (air) | 73.7 |
| Generator | 77.6 |
| Man Lift | 62.7 |
| **Architectural Coating Combined Noise Level** | 79.2 |
| **PAVING** | |
| Excavator | 71.7 |
| Backhoe | 68.6 |
| Gradall | 74.4 |
| Paver | 69.2 |
| Concrete Mixer Truck | 69.8 |
| Roller | 68.0 |
| Compactor (ground) | 71.2 |
| Generator | 77.6 |
| Compressor (air) | 73.7 |
| **Paving Combined Noise Level** | 81.6 |
| **NIGHTTIME CONSTRUCTION** | |
| Concrete Mixer Truck (x4) | 75.8 |
| Concrete Pump Truck (x4) | 75.4 |
| **Nighttime Construction Combined Noise Level** | 78.6 |
| **Source**: Federal Highway Administration, Roadway Construction Noise Model, 2008. | |

| EXISTING AMBIENT NOISE LEVELS AT MONITORING LOCATIONS | | |
|---|---|---|
| **Noise Monitoring Site** | **Noise Monitoring Location** | **Noise Level (dBA, Leq)** |
| 1 | Avalon Blvd. and Desford St. | 70.3 |
| 2 | Residence (21418 Garston Ave.) | 55.3 |
| 3 | Avalon Blvd. and Carson St. | 74.3 |
| 4 | Residence (750 Carson St.) | 71.7 |
| 5 | Carson Event Center Parking Lot | 67.5 |
| 6 | Carnegie Middle School | 62.9 |
| **SOURCE**: TAHA, 2025. | | |

| CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Nearest Construction Zone** | **Intervening Building /a/** | **Reference Noise Level (dBA)** | **Construction Noise at Receptor from Center of Site (dBA, Leq (8-hour))** | **Exceed 65 dBA Threshold?** |
| **First Row Receptors** | | | | | |
| Single-family residences to the north along Desford St. | 100 | 0 | 85.2 | 79.2 | Yes |
| Single- and multi-family residences to the west along Avalaon Blvd. | 190 | 0 | 85.2 | 73.6 | Yes |
| Single- and multi-family residences to the south along Carson St. | 200 | 0 | 85.2 | 73.2 | Yes |
| Golden Wings Academy to the South | 300 | 0 | 85.2 | 69.6 | Yes |
| Carnegie Middle School to the South | 220 | 0 | 85.2 | 72.3 | Yes |
| **Second Row Receptors** | | | | | |
| Single-family residences north of Desford St. | 280 | 4.5 | 85.2 | 65.7 | Yes |
| /a/ -4.5 dB for on intervening row of buildings and -1.5 dB for each subsequent row. | | | | | |
| **SOURCE**: TAHA, 2025. | | | | | |

| MITIGATED CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Nearest Construction Zone** | **Intervening Building /a/** | **Reference Noise Level (dBA)** | **Unmitigated Construction Noise at Receptor from Center of Site (dBA, Leq (8-hour))** | **Mitigation Measure** | **Mitigated Construction Noise at Receptor from Center of Site (dBA, Leq (8-hour))** | **Exceed 65 dBA Threshold?** |
| **First Row Receptors** | | | | | | | |
| Single-family residences to the north along Desford St. | 100 | 0 | 85.1 | 79.1 | 15.0 | 64.1 | No |
| Single- and multi-family residences to the west along Avalaon Blvd. | 190 | 0 | 85.1 | 73.5 | 15.0 | 58.5 | No |
| Single- and multi-family residences to the south along Carson St. | 200 | 0 | 85.1 | 73.1 | 15.0 | 58.1 | No |
| Golden Wings Academy to the South | 300 | 0 | 85.1 | 69.5 | 15.0 | 54.5 | No |
| Carnegie Middle School to the South | 220 | 0 | 85.1 | 72.2 | 15.0 | 57.2 | No |
| **Second Row Receptors** | | | | | | | |
| Single-family residences north of Desford St. | 280 | 4.5 | 85.1 | 65.6 | 15.0 | 50.6 | No |
| /a/ -4.5 dB for on intervening row of buildings and -1.5 dB for each subsequent row. | | | | | | | |
| /b/ -15 dB for Temporary Noise Barriers | | | | | | | |
| **SOURCE**: TAHA, 2025. | | | | | | | |

| NIGHTTIME CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS | | | | | |
|---|---|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Nearest Construction Zone** | **Intervening Building /a/** | **Reference Noise Level (dBA)** | **Construction Noise at Receptor from Center of Site (dBA, Leq (8-hour))** | **Exceed 60 dBA Nighttime Threshold?** |
| Single-family residences to the north along Desford St. | 100 | 0 | 78.6 | 72.6 | Yes |
| Single- and multi-family residences to the west along Avalaon Blvd. | 190 | 0 | 78.6 | 67.0 | Yes |
| Single- and multi-family residences to the south along Carson St. | 200 | 0 | 78.6 | 66.6 | Yes |
| Single-family residences north of Desford St. | 280 | 4.5 | 78.6 | 59.1 | No |
| /a/ -4.5 dB for on intervening row of buildings and -1.5 dB for each subsequent row. | | | | | |
| **SOURCE**: TAHA, 2025. | | | | | |

| MITIGATED NIGHTTIME CONSTRUCTION NOISE LEVELS AT SENSITIVE RECEPTORS | | | | | | |
|---|---|---|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Nearest Construction Zone** | **Intervening Building /a/** | **Reference Noise Level (dBA)** | **Mitigation Measure'** | **Mitigated Construction Noise at Receptor from Center of Site (dBA, Leq (8-hour))** | **Exceed 60 dBA Nighttime Threshold?** |
| Single-family residences to the north along Desford St. | 100 | 0 | 78.6 | 15 | 57.6 | No |
| Single- and multi-family residences to the west along Avalaon Blvd. | 190 | 0 | 78.6 | 15 | 52.0 | No |
| Single- and multi-family residences to the south along Carson St. | 200 | 0 | 78.6 | 15 | 51.6 | No |
| Single-family residences north of Desford St. | 280 | 4.5 | 78.6 | 15 | 44.1 | No |
| /a/ -4.5 dB for on intervening row of buildings and -1.5 dB for each subsequent row. | | | | | | |
| /b/ -15 dB for Temporary Noise Barriers | | | | | | |
| **SOURCE**: TAHA, 2025. | | | | | | |

**Parking Noise**

| | |
|---|---|
| 1,000 Space Garage | 56.4 |
| 640 Space Garage | 54.5 |

Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

| PARKING NOISE LEVELS AT SENSITIVE RECEPTORS | | | |
|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Parking Structure** | **Parking Noise (dBA, Leq) Modified Project** | **Parking Noise (dBA, Leq) Project Option** |
| Residences along Desford St.to the north of the new hotel podium parking | 150 | 44.9 | 46.9 |
| Residences along Desford St.to the east of the mixed-use housing parking | 200 | 42.4 | **n/a** |

**Rooftop Noise**

| | |
|---|---|
| Raised Voice at 3 feet | 78 |
| 100 People Speaking in Raised Voice at 3 feet | 98 |

| ROOFTOP NOISE LEVELS AT SENSITIVE RECEPTORS | | | | | | |
|---|---|---|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Rooftop** | **Intervening Building /a/** | **Reference Noise Level (dBA)** | **Existing Ambient Noise Level** | **Rooftop Noise at Sensitive Receptors (dBA, Leq)** | **Exceed Threshold?** |
| **First Row Receptors** | | | | | | |
| Single-family residences to the north along Desford St. | 250 | 0 | 98 | 55.3 | 59.6 | No |
| Single- and multi-family residences to the west along Avalaon Blvd. | 1,200 | 0 | 98 | 70.3 | 46.0 | No |
| Single- and multi-family residences to the south along Carson St. | 630 | 0 | 98 | 71.7 | 51.6 | No |
| Golden Wings Academy to the South | 500 | 0 | 98 | 71.7 | 53.6 | No |
| Carnegie Middle School to the South | 670 | 0 | 98 | 71.7 | 51.0 | No |
| Single-family residences north of Desford St. | 425 | 0 | 98 | 55.3 | 55.0 | No |

| ROOFTOP NOISE LEVELS AT SENSITIVE RECEPTORS | | | | | | |
|---|---|---|---|---|---|---|
| **Sensitive Receptors** | **Distance (feet) from Center of Rooftop** | **Reference Noise Level (dBA)** | **Existing Ambient Noise Level** | **Mitigation Measure** | **Rooftop Noise at Sensitive Receptors (dBA, Leq)** | **Exceed Threshold?** |
| **First Row Receptors** | | | | | | |
| Single-family residences to the north along Desford St. | 250 | 98 | 55.3 | 10 | 49.6 | No |
| Single- and multi-family residences to the west along Avalaon Blvd. | 1,200 | 98 | 70.3 | 0 | 46.0 | No |
| Single- and multi-family residences to the south along Carson St. | 630 | 98 | 71.7 | 0 | 51.6 | No |
| Golden Wings Academy to the South | 500 | 98 | 71.7 | 0 | 53.6 | No |
| Carnegie Middle School to the South | 670 | 98 | 71.7 | 0 | 51.0 | No |
| Single-family residences north of Desford St. | 425 | 98 | 55.3 | 10 | 45.0 | No |

**Vibration Formulas**

**Vibration PPV Attenuation**

**Equation:** PPVequip = PPVref x (25/D)^1.5
**PPV (equip)** is the peak particle velocity in in/sec of the equipment adjusted for distance
**PPV (ref)** is the reference vibration level in in/sec at 25 feet from Table 12-2
**D** is the distance from the equipment to the receiver.

**Source**: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

**Vibration Damage and Annoyance Analysis**

| Construction Vibration Damage Criteria | |
|---|---|
| **Building/Structural Category** | **PPV, in/sec** |
| Fragile Buildings | 0.1 |
| Historic Buildings | 0.25 |
| Residences 50 years old or more | 0.3 |
| Residences and modern industrial/commercial buildings less than 50 years old | 0.5 |

| Vibration Velocities for Construction Equipment | | |
|---|---|---|
| **Equipment** | **PPV at 25 Feet (Inches/Second)** | **Safe Distance to Not Exceed Vibration Damage Threshold (feet)** |
| Loaded Truck | 0.076 | 22 |
| Excavator | 0.040 | 15 |
| Small Bulldozxer | 0.003 | 3 |
| **Source:** FTA, Transit Noise and Vibration Impact Assessment, September 2018. | | |

# Noise Monitoring Data

Site 1: Avalon Blvd. and Desford St.



# Session Report

**12/15/2025**

## Information Panel

| | |
|---|---|
| Name | Carson Specifc Plan_S1 |
| Start Time | 10/7/2025 10:07:30 AM |
| Stop Time | 10/7/2025 10:22:30 AM |
| Device Name | BGS100001 |
| Model Type | SoundPro DL |
| Device Firmware Rev | R.13J |
| Comments | Main source of noise from traffic along Avalon Blvd. and traffic entering/exiting residential community |

## Summary Data Panel

| Description | Meter | Value | Description | Meter | Value |
|---|---|---|---|---|---|
| Leq | 1 | 70.3 dB | L50 | 1 | 65.1 dB |
| Exchange Rate | 1 | 3 dB | Weighting | 1 | A |
| Response | 1 | FAST | Bandwidth | 1 | OFF |
| Exchange Rate | 2 | 3 dB | Weighting | 2 | A |
| Response | 2 | SLOW | | | |

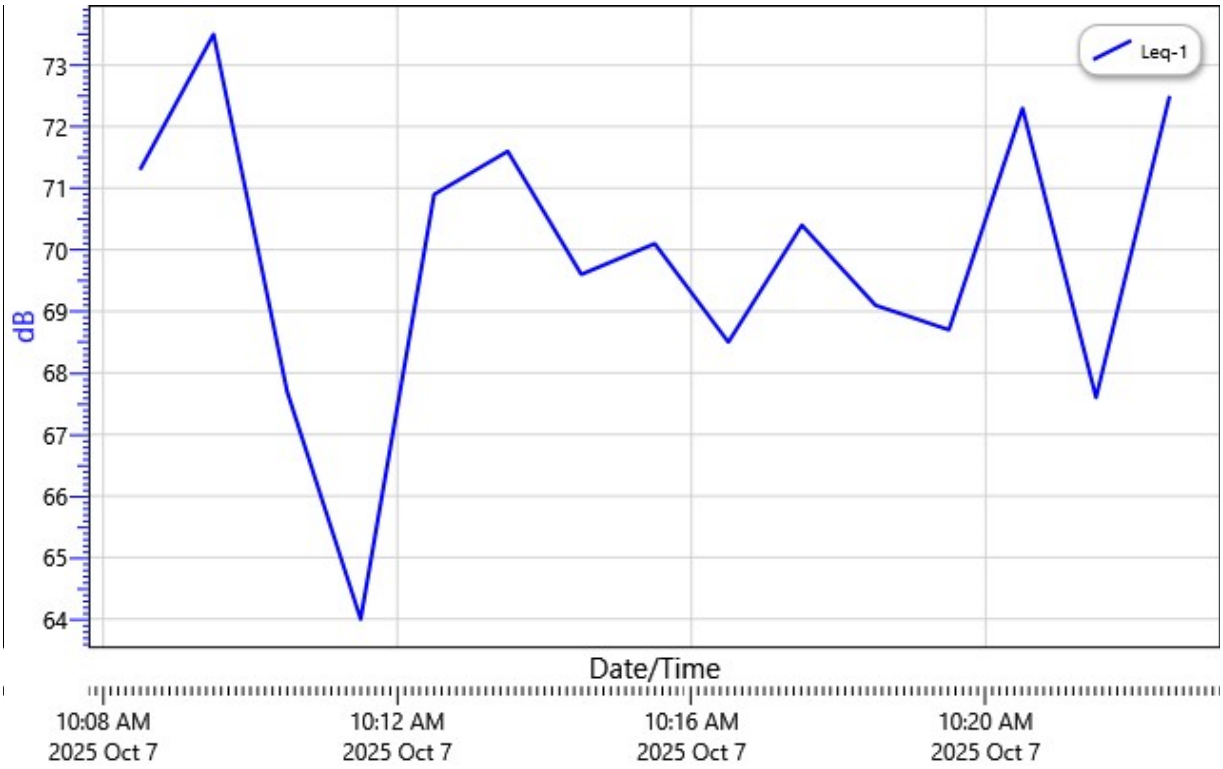
## Logged Data Table

| Date/Time | Leq-1 |
|---|---|
| 10/7/2025 10:08:30 AM | 71.3 |
| 10:09:30 AM | 73.5 |
| 10:10:30 AM | 67.7 |
| 10:11:30 AM | 64 |
| 10:12:30 AM | 70.9 |
| 10:13:30 AM | 71.6 |
| 10:14:30 AM | 69.6 |
| 10:15:30 AM | 70.1 |
| 10:16:30 AM | 68.5 |
| 10:17:30 AM | 70.4 |
| 10:18:30 AM | 69.1 |
| 10:19:30 AM | 68.7 |
| 10:20:30 AM | 72.3 |
| 10:21:30 AM | 67.6 |

10:22:30 AM 72.5

## Logged Data Chart

Carson Specifc Plan_S1: Logged Data Chart



Site 2: Residence (21418 Garston Ave.)



# Session Report

**12/15/2025**

## Information Panel

| | |
|---|---|
| Name | Carson Specifc Plan_S2 |
| Start Time | 10/7/2025 10:39:05 AM |
| Stop Time | 10/7/2025 10:54:05 AM |
| Device Name | BGS100001 |
| Model Type | SoundPro DL |
| Device Firmware Rev | R.13J |
| Comments | Main source of noise from traffic along Desford St. |

## Summary Data Panel

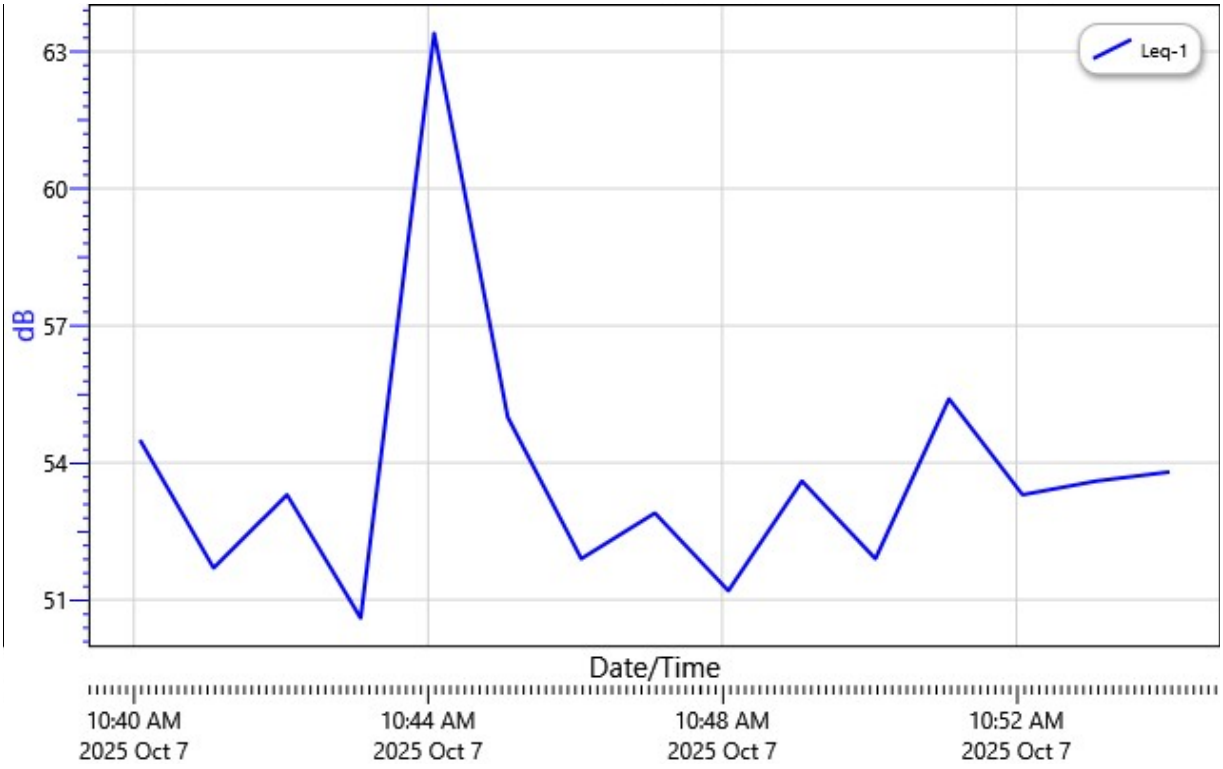
| Description | Meter | Value | Description | Meter | Value |
|---|---|---|---|---|---|
| Leq | 1 | 55.3 dB | L50 | 1 | 51.5 dB |
| Exchange Rate | 1 | 3 dB | Weighting | 1 | A |
| Response | 1 | FAST | Bandwidth | 1 | OFF |
| Exchange Rate | 2 | 3 dB | Weighting | 2 | A |
| Response | 2 | SLOW | | | |

## Logged Data Table

| Date/Time | Leq-1 |
|---|---|
| 10/7/2025 10:40:05 AM | 54.5 |
| 10:41:05 AM | 51.7 |
| 10:42:05 AM | 53.3 |
| 10:43:05 AM | 50.6 |
| 10:44:05 AM | 63.4 |
| 10:45:05 AM | 55 |
| 10:46:05 AM | 51.9 |
| 10:47:05 AM | 52.9 |
| 10:48:05 AM | 51.2 |
| 10:49:05 AM | 53.6 |
| 10:50:05 AM | 51.9 |
| 10:51:05 AM | 55.4 |
| 10:52:05 AM | 53.3 |
| 10:53:05 AM | 53.6 |
| 10:54:05 AM | 53.8 |

## Logged Data Chart

Carson Specifc Plan_S2: Logged Data Chart



Site 3: Avalon Blvd. and Carson St.



# Session Report

**12/15/2025**

## Information Panel

| | |
|---|---|
| Name | Carson Specifc Plan_S3 |
| Start Time | 10/7/2025 11:06:01 AM |
| Stop Time | 10/7/2025 11:22:01 AM |
| Device Name | BGS100001 |
| Model Type | SoundPro DL |
| Device Firmware Rev | R.13J |
| Comments | Main source of noise from traffic along Carson St. and Avalon Blvd. Paused measurement at 2 min and 12 seconds, pedestrian approached measurement taker in conversation |

## Summary Data Panel

| Description | Meter | Value | Description | Meter | Value |
|---|---|---|---|---|---|
| Leq | 1 | 74.3 dB | L50 | 1 | 67.4 dB |
| Exchange Rate | 1 | 3 dB | Weighting | 1 | A |
| Response | 1 | FAST | Bandwidth | 1 | OFF |
| Exchange Rate | 2 | 3 dB | Weighting | 2 | A |
| Response | 2 | SLOW | | | |

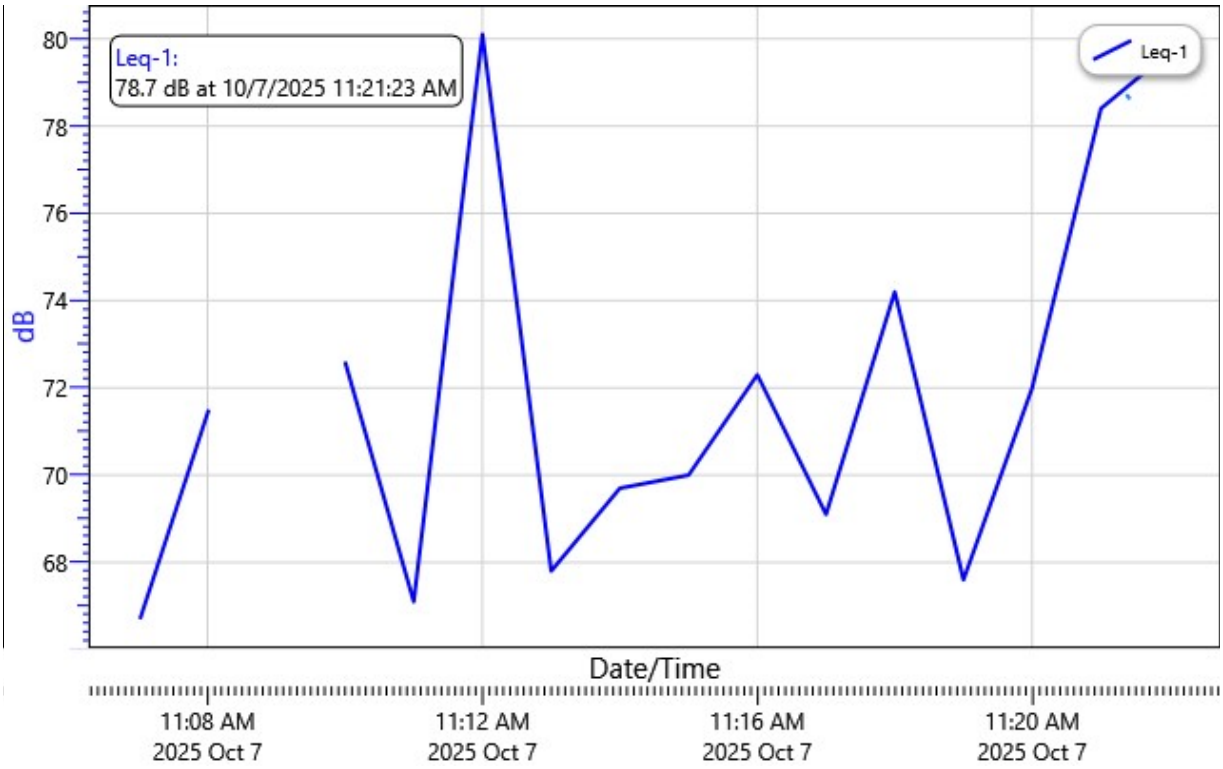
## Logged Data Table

| Date/Time | Leq-1 |
|---|---|
| 10/7/2025 11:07:01 AM | 66.7 |
| 11:08:01 AM | 71.5 |
| 11:10:00 AM | 72.6 |
| 11:11:00 AM | 67.1 |
| 11:12:00 AM | 80.1 |
| 11:13:00 AM | 67.8 |
| 11:14:00 AM | 69.7 |
| 11:15:00 AM | 70 |
| 11:16:00 AM | 72.3 |
| 11:17:00 AM | 69.1 |
| 11:18:00 AM | 74.2 |
| 11:19:00 AM | 67.6 |
| 11:20:00 AM | 72 |
| 11:21:00 AM | 78.4 |

11:22:00 AM 79.7

## Logged Data Chart

Carson Specifc Plan_S3: Logged Data Chart



Site 4: Residence (750 Carson St.)



# Session Report

**12/15/2025**

## Information Panel

| | |
|---|---|
| Name | Carson Specific Plan_S4 |
| Start Time | 10/15/2025 9:56:45 AM |
| Stop Time | 10/15/2025 10:11:45 AM |
| Device Name | BGS100001 |
| Model Type | SoundPro DL |
| Device Firmware Rev | R.13J |
| Comments | Main noise source from traffic along Carson Street |

## Summary Data Panel

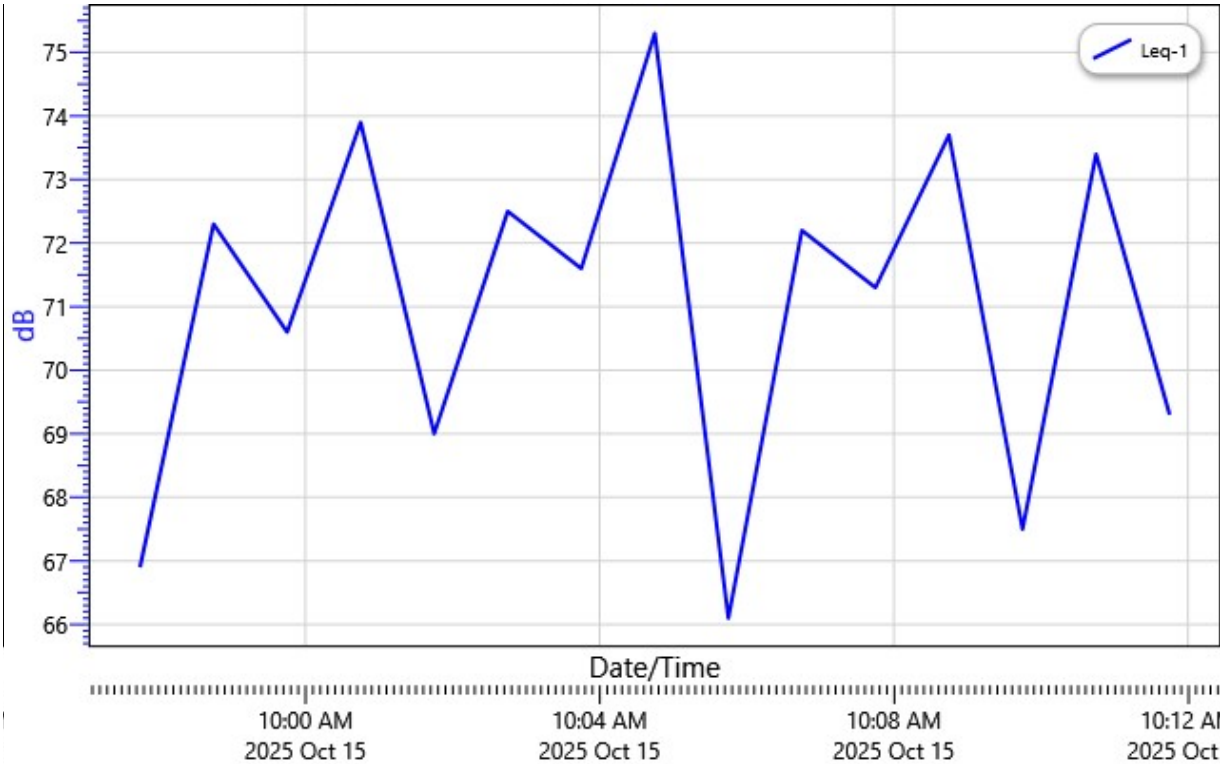
| Description | Meter | Value | Description | Meter | Value |
|---|---|---|---|---|---|
| Leq | 1 | 71.7 dB | L50 | 1 | 67.7 dB |
| Exchange Rate | 1 | 3 dB | Weighting | 1 | A |
| Response | 1 | SLOW | Bandwidth | 1 | OFF |
| Exchange Rate | 2 | 3 dB | Weighting | 2 | A |
| Response | 2 | SLOW | | | |

## Logged Data Table

| Date/Time | Leq-1 |
|---|---|
| 10/15/2025 9:57:45 AM | 66.9 |
| 9:58:45 AM | 72.3 |
| 9:59:45 AM | 70.6 |
| 10:00:45 AM | 73.9 |
| 10:01:45 AM | 69 |
| 10:02:45 AM | 72.5 |
| 10:03:45 AM | 71.6 |
| 10:04:45 AM | 75.3 |
| 10:05:45 AM | 66.1 |
| 10:06:45 AM | 72.2 |
| 10:07:45 AM | 71.3 |
| 10:08:45 AM | 73.7 |
| 10:09:45 AM | 67.5 |
| 10:10:45 AM | 73.4 |
| 10:11:45 AM | 69.3 |

## Logged Data Chart

Carson Specific Plan_S4: Logged Data Chart



Site 5: Carson Event Center Parking Lot



# Session Report

**12/15/2025**

## Information Panel

| | |
|---|---|
| Name | Carson Specific Plan_S5 |
| Start Time | 10/15/2025 10:20:19 AM |
| Stop Time | 10/15/2025 10:37:49 AM |
| Device Name | BGS100001 |
| Model Type | SoundPro DL |
| Device Firmware Rev | R.13J |
| Comments | Main source of noise from vehicles enter/exiting parking lot. Paused at 11 min and 50 sec, pedestrian approached measurement taker in conversation |

## Summary Data Panel

| Description | Meter | Value | Description | Meter | Value |
|---|---|---|---|---|---|
| Leq | 1 | 67.5 dB | L50 | 1 | 60.9 dB |
| Exchange Rate | 1 | 3 dB | Weighting | 1 | A |
| Response | 1 | SLOW | Bandwidth | 1 | OFF |
| Exchange Rate | 2 | 3 dB | Weighting | 2 | A |
| Response | 2 | SLOW | | | |

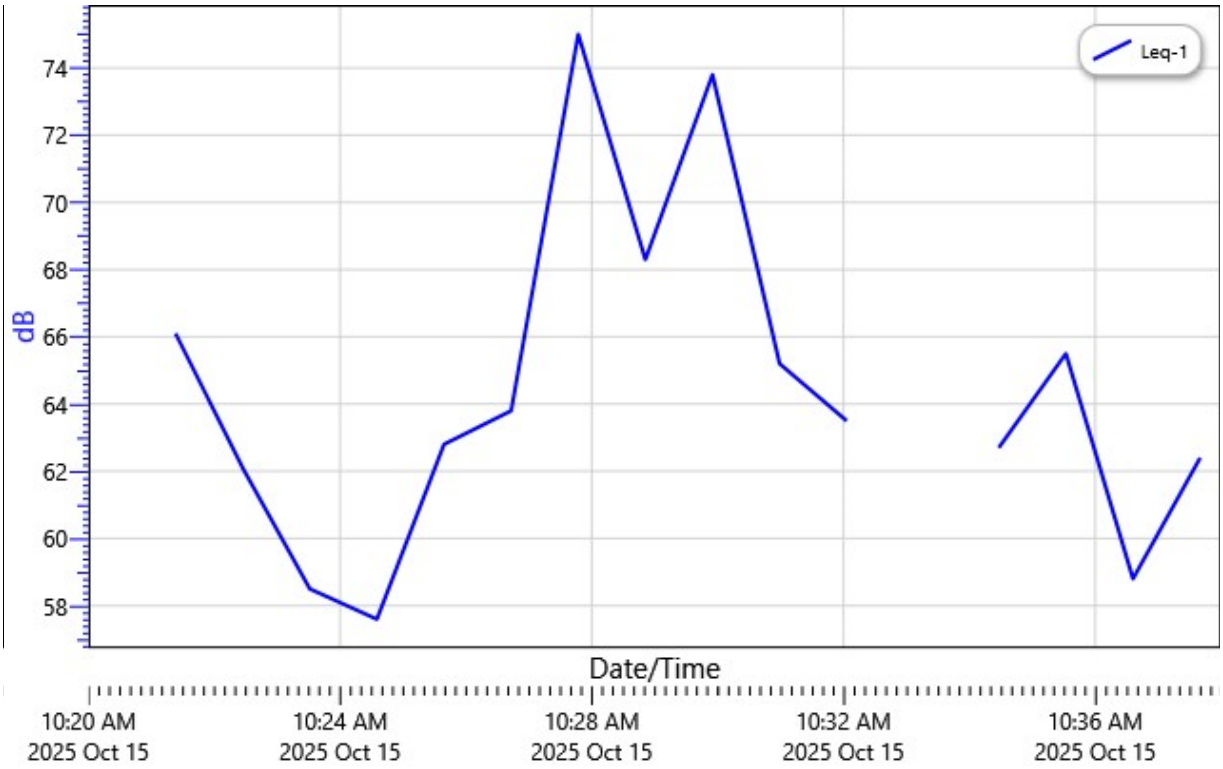
## Logged Data Table

| Date/Time | Leq-1 |
|---|---|
| 10/15/2025 10:21:23 AM | 66.1 |
| 10:22:27 AM | 62.1 |
| 10:23:31 AM | 58.5 |
| 10:24:35 AM | 57.6 |
| 10:25:39 AM | 62.8 |
| 10:26:43 AM | 63.8 |
| 10:27:47 AM | 75 |
| 10:28:51 AM | 68.3 |
| 10:29:55 AM | 73.8 |
| 10:30:59 AM | 65.2 |
| 10:32:03 AM | 63.5 |
| 10:34:28 AM | 62.7 |
| 10:35:32 AM | 65.5 |
| 10:36:36 AM | 58.8 |

10:37:40 AM 62.4

## Logged Data Chart

Carson Specific Plan_S5: Logged Data Chart



Site 6: Carnegie Middle School



# Session Report

**12/15/2025**

## Information Panel

| | |
|---|---|
| Name | Carson Specific Plan_S6 |
| Start Time | 10/15/2025 10:44:12 AM |
| Stop Time | 10/15/2025 10:59:12 AM |
| Device Name | BGS100001 |
| Model Type | SoundPro DL |
| Device Firmware Rev | R.13J |
| Comments | Main noise source from traffic along Bonita Street |

## Summary Data Panel

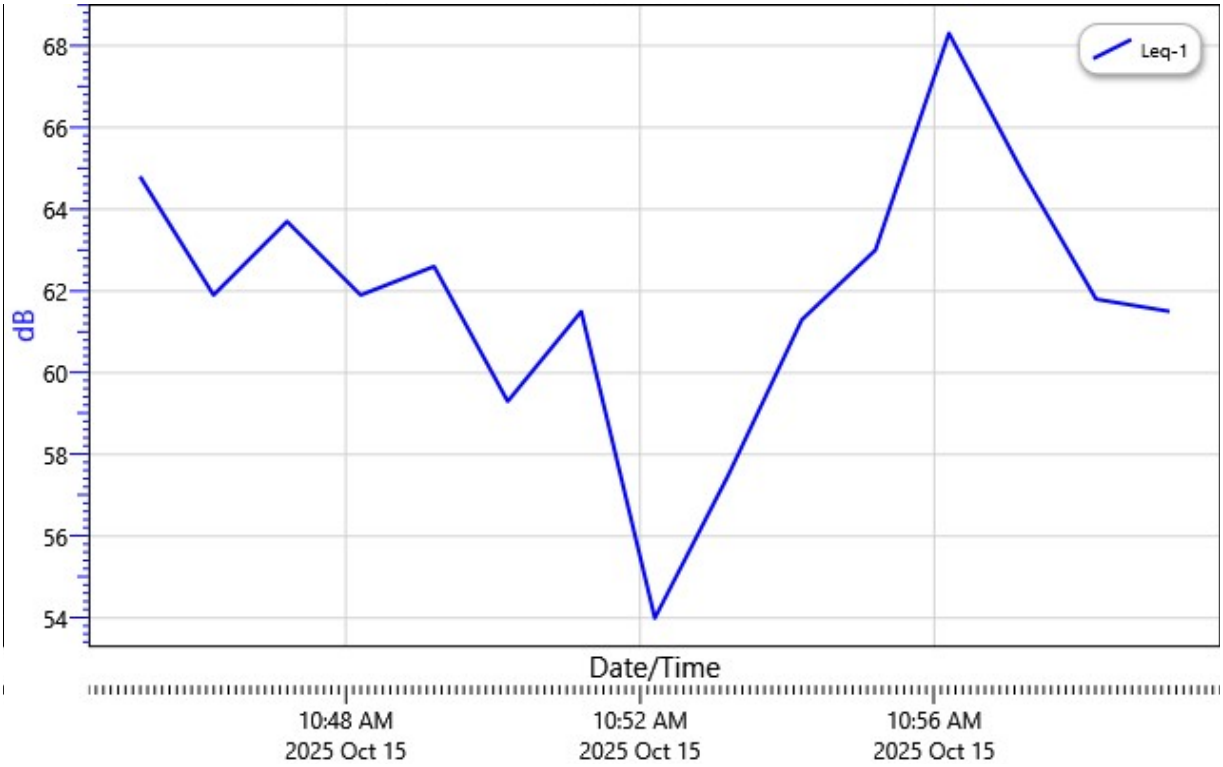
| Description | Meter | Value | Description | Meter | Value |
|---|---|---|---|---|---|
| Leq | 1 | 62.9 dB | L50 | 1 | 57.2 dB |
| Exchange Rate | 1 | 3 dB | Weighting | 1 | A |
| Response | 1 | SLOW | Bandwidth | 1 | OFF |
| Exchange Rate | 2 | 3 dB | Weighting | 2 | A |
| Response | 2 | SLOW | | | |

## Logged Data Table

| Date/Time | Leq-1 |
|---|---|
| 10/15/2025 10:45:12 AM | 64.8 |
| 10:46:12 AM | 61.9 |
| 10:47:12 AM | 63.7 |
| 10:48:12 AM | 61.9 |
| 10:49:12 AM | 62.6 |
| 10:50:12 AM | 59.3 |
| 10:51:12 AM | 61.5 |
| 10:52:12 AM | 54 |
| 10:53:12 AM | 57.5 |
| 10:54:12 AM | 61.3 |
| 10:55:12 AM | 63 |
| 10:56:12 AM | 68.3 |
| 10:57:12 AM | 64.9 |
| 10:58:12 AM | 61.8 |
| 10:59:12 AM | 61.5 |

## Logged Data Chart

Carson Specific Plan_S6: Logged Data Chart



# Appendix C

Transportation Impact Analysis

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801 South Grand Avenue, Suite 750
Los Angeles, CA 90017

# TECHNICAL MEMORANDUM

| | |
|---|---|
| **To:** City of Carson | **From:** Iteris, Inc. |
| **Date:** January 8, 2026 | |
| **RE:** Carson Civic Center Specific Plan – CEQA Transportation Impact Analysis | |

## INTRODUCTION

This memorandum describes the California Environmental Quality Act (CEQA) transportation impact analysis for the Carson Civic Center Specific Plan project. The evaluation is consistent with CEQA Guidelines effective December 28, 2018. The Specific Plan's impacts are evaluated per Appendix G Environmental Checklist Form of the current CEQA guidelines, which assesses projects by the four criteria listed below:

***T-1*** *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

***T-2*** *Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

***T-3*** *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

***T-4*** *Would the project result in inadequate emergency access?*

## TRANSPORTATION SETTING

The project site is bound by Avalon Boulevard, Carson Street, and Desford Street. Avalon Boulevard, oriented in a north-south direction, is designated as a Major Highway consisting of three lanes in each direction north of Carson Street and two lanes in each direction south of Carson Street. Direct access to I-405 is provided along Avalon Boulevard via northbound and southbound off/on-ramp intersections. Carson Street, oriented in an east-west direction, is designated as a Major Highway consisting of two lanes in each direction in the study area, with the exception of a short segment between Bonita Street and the I-405 Southbound Ramps where three lanes in each direction are provided. Direct access to I-405 is provided along Carson Street via northbound and southbound off/on-ramp intersections.

Carson Street and Avalon Boulevard both provide approximately 6 to 10-foot wide sidewalks with or without landscaping on both sides of the roadways. Civic Plaza Drive also provides a short segment of 6-foot wide sidewalks on both sides of the roadways into the existing sidewalks built internally within the site to connect to the existing buildings. In contrast, Civic Center Drive consists of a sidewalk only on the east side of the roadway, while the west side lacks pedestrian infrastructure, resulting in a gap that may affect pedestrian safety.

In terms of bicycle mobility, only Carson Street is designated as a Class III (sharrows) bike route. No other bicycle facilities are provided in the study area.

The roadways in the vicinity of the site are served by the following transit providers:

- Los Angeles Metro - Route 246 providing weekday and weekend service
- Long Beach Transit – Routes 2 and 4, providing weekday and Saturday service
- Torrance Transit – Route 3 providing weekday and weekend service, Route R3 providing weekday service only

## ANALYSIS METHODOLOGY

For impact criteria T-1, T-3, and T-4, a qualitative assessment was prepared, through review of the Specific Plan goals and policies (and comparing against relevant plans as appropriate) to determine if any potential significant impacts would occur as a result of the Project.

For impact criteria T-2, a technical analysis was performed using the Southern California Association of Governments (SCAG) model, a computerized travel demand model. Iteris utilized the latest version of the SCAG Activity-Based Model (ABM) to generate the VMT statistics. The ABM includes the following features/capabilities: comprehensively characterizes the activity-travel patterns of all household members, incorporates spatial-temporal dependencies and constraints between and within individuals of a household, incorporates advanced vehicle type choice sub-model (vehicle fleet composition defined by body type, fuel type, make/model, and vintage) for emissions analysis, and involves a portable and flexible object-oriented software architecture design. The Specific Plan area is contained within one Transportation Analysis Zone (TAZ) in the model, as shown in **Figure 1**.

For the impact criteria T-2 analysis, all VMT for trips beginning or ending in the City were accounted for, consistent with the Governor's Office of Planning and Research (OPR) Technical Advisory on Evaluating Transportation Impacts in CEQA. While other methodologies measure only the amount of VMT traveling on streets within the City, or only half the distance of trips from outside of the City (as in SB 375 Regional Plan Climate Target analysis), the Specific Plan analyzes the full extent of vehicle travel from the Project.

In order to determine the Specific Plan project's potential level of impact, new SCAG model scenarios were prepared, incorporating the land use projections of the Specific Plan. Two scenarios are evaluated, a preferred plan and an alternative plan. For land use plans which include both residential and employment uses, the appropriate analysis metric is VMT per service population, where service population is defined as the number of residents plus the number of jobs. The land use plan in the preferred scenario includes additional residential and non-residential land use summarized as follows:

- City Hall renovation
- 2,150-seat Performing Arts Center
- 420-room hotel
- 140 units of multifamily residential housing
- 50,000 square feet of restaurant and retail space

- 12,000 square feet of office space
- 25,000 square foot Interactive museum
- Bus Depot

The alternative plan scenario is similar to the preferred plan, with the major difference being the addition of an entertainment/retail complex consisting of 130,000 square feet of retail space, 50,000 square feet of "mega sports bar" use, and 30,000 square feet of restaurant space, in place of the 420-room hotel use.

## IMPACT ANALYSIS

This section presents the CEQA impact evaluation for each of the four criteria.

### T-1 Impact Evaluation

***Threshold:*** *Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Carson is a member of the SCAG Regional Council, the decision-making body of the SCAG Joint Powers Authority under California state law, established as an association of local governments and agencies that voluntarily convene as a forum to address regional issues. Under federal law, SCAG is designated as a Metropolitan Planning Organization (MPO) and under state law as a Regional Transportation Planning Agency and a Council of Governments. The SCAG **Regional Transportation Plan/Sustainable Communities Strategy** (RTP/SCS), Connect SoCal is a long-range visioning plan that builds upon and expands land use and transportation strategies established over several planning cycles to increase mobility options and achieve a more sustainable growth pattern. The Connect SoCal RTP/SCS is a planning document for the region, allowing project sponsors to qualify for federal funding. In addition, Connect SoCal 2024 will identify a combination of transportation and land use strategies that help the region achieve state greenhouse gas emission reduction goals and federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, and support our vital goods movement industry.

The RTP/SCS is updated every four years and it is anticipated that the City will work with SCAG to update the RTP/SCS to be consistent with the Civic Center Specific Plan. The Specific Plan includes strategies for mixed-use development, which allows multiple land uses to work together, to reduce vehicle trip lengths. The California Air Resources Board's (CARB) 2016 Mobile Source Strategy recognizes that coordinated regional planning can improve California's land use patterns and transportation policy in a way that reduces transportation related emissions by reducing growth in VMT.

In addition, the Specific Plan project's planned transportation networks provide consistency related to the General Plan Circulation Element (which includes street classifications, proposed bike facilities, and transit routes. As such, the Civic Center Specific Plan is consistent with programs, plans, ordinances and policies addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities, making the impact **less-than-significant** and no further mitigation would be required.

## T-2 Impact Evaluation

***Threshold:*** *Would the project conflict with or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Under criteria T-2, the proposed Specific Plan's effects on Vehicle Miles Traveled (VMT) are evaluated, as described in the following sub-sections. As mentioned, two scenarios are evaluated:

- Preferred Plan scenario
- Alternative Plan scenario, which includes an entertainment/retail complex in place of the hotel use

### VMT Impact Analysis

The City currently evaluates VMT impacts of land use plans using the following thresholds of significance:

- A project will be considered to result in a significant impact if the VMT rate for the plan would exceed 15 percent below the applicable baseline VMT rate (defined as the City of Carson per applicable service population).

This threshold was applied to evaluate the potential transportation impacts of the Specific Plan. As mentioned, since the project includes residential and non-residential land use, VMT per service population (i.e., residents plus jobs) was used as the analysis metric.

Using the SCAG model, citywide VMT outputs were prepared for existing and future year 2050 scenarios, without and with the project (preferred and alternative plan scenarios). In addition, the project includes multiple strategies to reduce vehicle trips and VMT, which consist of the following:

- Transportation Demand Management (TDM) strategies
- Increased transit ridership and frequency via a new bus depot on the site
- Increased land use density
- Reduced residential parking requirements
- Pedestrian network improvements
- Integrating affordable housing
- Bicycle Parking

To account for these project features in the "plus project" scenario, off-model adjustments were prepared using guidance from the California Air Pollution Control Officers Association (CAPCOA) *Handbook for Analyzing Greenhouse Gas Emission Reductions Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers*.

**Table 1** summarizes the daily citywide VMT per service population for all scenarios evaluated. Detailed VMT calculations are provided in **Appendix A**.

**Table 1: Specific Plan VMT Summary**

| Scenario (Area) | Total Home-based Daily VMT | Total Work-based Daily VMT | Total Daily VMT | Service Population* | VMT / Service Population |
|---|---|---|---|---|---|
| Existing (City of Carson) | 1,543,781 | 947,055 | 2,490,836 | 160,708 | 15.50[1] |
| Existing Plus Project (City of Carson) – Preferred Scenario | 1,532,293 | 936,792 | 2,469,084 | 162,037 | 15.24 |
| Existing Plus Project (City of Carson) - Alternative Scenario | 1,535,625 | 937,170 | 2,472,796 | 162,223 | 15.24 |
| Future 2050 Without Project (City of Carson) | 1,403,904 | 736,700 | 2,140,604 | 168,996 | 12.67[2] |
| Future 2050 With Project (City of Carson) – Preferred Scenario | 1,400,594 | 745,455 | 2,146,049 | 170,325 | 12.60 |
| Future 2050 With Project (City of Carson) - Alternative Scenario | 1,403,640 | 745,756 | 2,149,396 | 170,511 | 12.61 |

* Service Population equals the total of residents and employees

[1] Significant impact threshold is 15% below Existing, which is equal to **13.17**

2 Significant impact threshold is 15% below Future Year 2050 Without Project, which is equal to **10.77**

As shown in **Table 1**, existing citywide VMT per service population is currently 15.50, which results in a significant impact threshold of 13.17 (i.e., 15% below 15.50) per the City's guidelines. The existing plus project VMT per service population including the preferred Specific Plan land uses, as described earlier, is forecast to be 15.24. Thus, while the "plus Specific Plan project" scenario VMT per service population is forecast to improve compared to the existing citywide VMT per service population, it is still forecast to exceed the City's CEQA threshold.

Similarly, the future year 2050 VMT per service population is forecast to be 12.67, which results in a significant impact threshold of 10.77. The future year 2050 with project VMT per service population is forecast to be 12.60, which exceeds the City's CEQA threshold.

For the alternative scenario, the VMT per service population outputs are very similar to the preferred plan results.

Thus, this impact is considered **significant and unavoidable** in both the preferred and alternative scenarios.

## T-3 Impact Evaluation

***Threshold:*** *Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*

One of the objectives of the Specific Plan is to ensure future development and transportation facilities

would improve connectivity and linkages. Any proposed roadway modifications included in the Specific Plan will be designed to City and State engineering design standards to meet sight distance requirements, including visibility of pedestrians and bicyclists. The Specific Plan does not propose any incompatible uses that would increase hazards. As a result, the Specific Plan will have a beneficial impact on geometric design features and incompatible uses.

As such, the Specific Plan would not substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment. Thus, this impact is considered **less than significant**.

## T-4 Impact Evaluation

***Threshold:*** *Would the project result in inadequate emergency access?*

The Specific Plan does not include elements that would impede emergency vehicle access. As mentioned, public roadways within the site, such as Civic Center Drive, would be designed to conform to City and County Fire Department standards for access, as would buildings included within new developments.

Thus, this impact is considered **less than significant**.

# APPENDIX A – VMT Calculations

**SCAG 2024 RTP/SCS (2019 Year Model Data - Existing)**

| Carson | | |
|---|---|---|
| **ID** | **Purpose** | **VMT** |
| Home-based | | 1,543,781 |
| | *Home-Based Work* | 11,668 |
| | *Home-Based Other & Other(External)* | 925,644 |
| | *Home-Based Work(External)* | 606,469 |
| Work-based | | 958,723 |
| | *Home-Based Work* | 11,668 |
| | *Work-Based Other & Other(External)* | 172,734 |
| | *Home(External)-Based Work* | 774,321 |
| Other-Based | | 1,571,876 |
| | *Other-Based Other* | 559,933 |
| | *Home(External)-Based Other* | 878,961 |
| | *Work(External)-Based Other* | 132,982 |
| | Total VMT (No Other-Based) | 3,502,779 |
| | Total Home-based VMT | 1,543,781 |
| | Total Work-based VMT | 947,055 |
| | Total Households | 27,069 |
| | Total Population | 96,232 |
| | Household Size | 3.56 |
| | Total Employees | 64,476 |
| | **Total Home-based VMT/Capita** | **16.04** |
| | **Total Work-based VMT/Employee** | **14.69** |
| | **Total VMT/Service Population** | **21.80** |
| | Total VMT (Home & Work-Based only) | 2,490,836 |
| | **Citywide VMT/Service Population** | **15.50** |

| Carson Civic Center Project TAZ (Existing With Project - Preferred Plan) | | | Existing/2019 scenario |
|---|---|---|---|
| Model Input | Total Population | 2,050 | |
| | Total Employees | 3,713 | |
| | Service Population | 5,763 | |
| *Raw Model Output* | Home-based VMT | 44,530 | |
| | Work-based VMT | 73,904 | |
| | Total VMT (without other) | 118,434 | |

**Application of VMT Reduction Measures**

| Category | Project VMT Reduction Measures | Reduction | Affected Population | Reduced VMT | | Notes |
|---|---|---|---|---|---|---|
| | | | | Residential | Work | |
| TDM | Carpool/Vanpool - 100+ employees | 4.0% | Employees | 0 | 2,956 | |
| | Trip Reduction Information | 2.0% | Employees (after previous reductions) | 0 | 1,419 | % applied to total minus previous reduction |
| Transit | Provide a bus depot on site to increase frequency/ridership | 5.7% | Emp & Residents (after previous reductions) | 2,516 | 3,928 | |
| Land Use | Increase in Residential Density | 9.4% | Residents | 3,961 | 0 | Assume current 35 du/ac vs new 45 du/ac |
| Parking | Reduce Residential Parking Requirements | 10.3% | Residents (after previous reductions) | 3,907 | 0 | % applied to total minus previous reduction |
| Pedestrian | Pedestrian Improvements (on-site) | 2.5% | Emp & Residents (after previous reductions) | 854 | 1,640 | % applied to total minus previous reduction |
| Affordable Housing | Affordable Housing | 0.40% | Residents | 251 | 0 | 16.25% of new units would be affordable |
| Bike Parking | Provide bicycle parking | 0.50% | Employees | 0 | 320 | % applied to total minus previous reduction |
| | | | **Total Reductions** | **-11,489** | **-10,263** | |
| | | | Home-based VMT after measures | 33,041 | - | |
| | | | **Home-based VMT/capita after measures** | **16.12** | - | |
| | | | Work-based VMT after measures | - | 63,641 | |
| | | | **Work-based VMT/employee after measures** | - | **17.14** | |

| | | |
|---|---|---|
| **VMT/Service Population (after measures)** | **16.78** | <--VMT of Project TAZ |
| Existing Citywide VMT/Service Population | 15.50 | |
| Threshold (15% below Ex Citywide) | 13.17 | |
| Raw With Project Citywide VMT/Service Pop | 15.37 | <--VMT/Service Pop without off-model reduction measures |
| **With Project Home-based VMT** | **1,532,293** | |
| **With Project Work-based VMT** | **936,792** | <--VMT including project reduction measures |
| **With Project Total VMT** | **2,469,084** | |
| **Citywide Service Population** | **162,037** | |
| **With Project Citywide VMT/Service Pop** | **15.24** | <--VMT/Service Pop including reduction measures |

| Carson Civic Center Project TAZ (Existing With Project - Alternative Scenario) | | | Existing/2019 scenario |
|---|---|---|---|
| Model Input | Total Population | 2,050 | |
| | Total Employees | 3,899 | |
| | Service Population | 5,949 | |
| *Raw Model Output* | Home-based VMT | 31,314 | |
| | Work-based VMT | 71,177 | |
| | Total VMT (without other) | 102,491 | |

**Application of VMT Reduction Measures**

| Category | Project VMT Reduction Measures | Reduction | Affected Population | Reduced VMT | | Notes |
|---|---|---|---|---|---|---|
| | | | | Residential | Work | |
| TDM | Carpool/Vanpool - 100+ employees | 4.0% | Employees | 0 | 2,847 | |
| | Trip Reduction Information | 2.0% | Employees (after previous reductions) | 0 | 1,367 | % applied to total minus previous reduction |
| Transit | Provide a bus depot on site to increase frequency/ridership | 5.7% | Emp & Residents (after previous reductions) | 1,769 | 3,783 | |
| Land Use | Increase in Residential Density | 9.4% | Residents | 2,786 | 0 | Assume current 35 du/ac vs new 45 du/ac |
| Parking | Reduce Residential Parking Requirements | 10.3% | Residents (after previous reductions) | 2,748 | 0 | % applied to total minus previous reduction |
| Pedestrian | Pedestrian Improvements (on-site) | 2.5% | Emp & Residents (after previous reductions) | 600 | 1,579 | % applied to total minus previous reduction |
| Affordable Housing | Affordable Housing | 0.40% | Residents | 253 | 0 | 16.25% of new units would be affordable |
| Bike Parking | Provide bicycle parking | 0.50% | Employees | 0 | 308 | % applied to total minus previous reduction |
| | | | **Total Reductions** | **-8,156** | **-9,885** | |
| | | | Home-based VMT after measures | 23,158 | - | |
| | | | **Home-based VMT/capita after measures** | **11.30** | - | |
| | | | Work-based VMT after measures | - | 61,292 | |
| | | | **Work-based VMT/employee after measures** | - | **15.72** | |

| | | |
|---|---|---|
| **VMT/Service Population (after measures)** | **14.20** | <--VMT of Project TAZ |
| Existing Citywide VMT/Service Population | 15.50 | |
| Threshold (15% below Ex Citywide) | 13.17 | |
| Raw With Project Citywide VMT/Service Pop | 15.37 | <--VMT/Service Pop without off-model reduction measures |
| **With Project Home-based VMT** | **1,535,625** | |
| **With Project Work-based VMT** | **937,170** | <--VMT including project reduction measures |
| **With Project Total VMT** | **2,472,796** | |
| **Citywide Service Population** | **162,223** | |
| **With Project Citywide VMT/Service Pop** | **15.24** | <--VMT/Service Pop including reduction measures |

**SCAG 2024 RTP/SCS (2050 Year Model Data - No Project)**

| Carson | | |
|---|---|---|
| **ID** | **Purpose** | **VMT** |
| Home-based | | 1,403,904 |
| | *Home-Based Work* | 9,073 |
| | *Home-Based Other & Other(External)* | 866,934 |
| | *Home-Based Work(External)* | 527,897 |
| Work-based | | 745,773 |
| | *Home-Based Work* | 9,073 |
| | *Work-Based Other & Other(External)* | 118,587 |
| | *Home(External)-Based Work* | 618,113 |
| Other-Based | | 1,385,609 |
| | *Other-Based Other* | 487,457 |
| | *Home(External)-Based Other* | 809,410 |
| | *Work(External)-Based Other* | 88,742 |
| | Total VMT (No Other-Based) | 3,038,756 |
| | Total Home-based VMT | 1,403,904 |
| | Total Work-based VMT | 736,700 |
| | Total Households | 31,647 |
| | Total Population | 100,460 |
| | Household Size | 3.17 |
| | Total Employees | 68,536 |
| | **Total Home-based VMT/Capita** | **13.97** |
| | **Total Work-based VMT/Employee** | **10.75** |
| | **VMT/Service Population** | **17.98** |
| | Total VMT (Home & Work-Based only) | 2,140,604 |
| | **Citywide VMT/Service Population** | **12.67** |

| Carson Civic Center Project TAZ (Future With Project - Preferred Plan) | | | 2050 scenario |
|---|---|---|---|
| Model Input | Total Population | 2,067 | |
| | Total Employees | 4,094 | |
| | Service Population | 6,161 | |
| *Raw Model Output* | Home-based VMT | 28,435 | |
| | Work-based VMT | 54,453 | |
| | Total VMT (without other) | 82,888 | |

**Application of VMT Reduction Measures**

| Category | Project VMT Reduction Measures | Reduction | Affected Population | Reduced VMT | | Notes |
|---|---|---|---|---|---|---|
| | | | | Residential | Work | |
| TDM | Carpool/Vanpool - 100+ employees | 4.0% | Employees | 0 | 2,178 | |
| | Trip Reduction Information | 2.0% | Employees (after previous reductions) | 0 | 1,046 | % applied to total minus previous reduction |
| Transit | Provide a bus depot on site to increase frequency/ridership | 5.7% | Emp & Residents (after previous reductions) | 1,607 | 2,894 | |
| Land Use | Increase in Residential Density | 9.4% | Residents | 2,529 | 0 | Assume current 35 du/ac vs new 45 du/ac |
| Parking | Reduce Residential Parking Requirements | 10.3% | Residents (after previous reductions) | 2,495 | 0 | % applied to total minus previous reduction |
| Pedestrian | Pedestrian Improvements (on-site) | 2.5% | Emp & Residents (after previous reductions) | 545 | 1,208 | % applied to total minus previous reduction |
| Affordable Housing | Affordable Housing | 0.40% | Residents | 189 | 0 | 16.25% of new units would be affordable |
| Bike Parking | Provide bicycle parking | 0.50% | Employees | 0 | 236 | % applied to total minus previous reduction |
| | | | **Total Reductions** | **-7,365** | **-7,562** | |
| | | | Home-based VMT after measures | 21,069 | - | |
| | | | **Home-based VMT/capita after measures** | **10.19** | - | |
| | | | Work-based VMT after measures | - | 46,891 | |
| | | | **Work-based VMT/employee after measures** | - | **11.45** | |

| | | |
|---|---|---|
| **VMT/Service Population (after measures)** | **11.03** | <--VMT of Project TAZ |
| Existing Citywide VMT/Service Population | 15.50 | |
| Threshold (15% below Ex Citywide) | 13.17 | |
| Raw With Project Citywide VMT/Service Pop | 15.37 | <--VMT/Service Pop without off-model reduction measures |
| **With Project Home-based VMT** | **1,400,594** | |
| **With Project Work-based VMT** | **745,455** | <--VMT including project reduction measures |
| **With Project Total VMT** | **2,146,049** | |
| **Citywide Service Population** | **170,325** | |
| **With Project Citywide VMT/Service Pop** | **12.60** | <--VMT/Service Pop including reduction measures |

# CITY OF CARSON
# CIVIC CENTER SPECIFIC PLAN

Final - December 2, 2025



CITY OF CARSON
*The Jewel of the South Bay*

GRUENASSOCIATES
ARCHITECTURE PLANNING INTERIORS LANDSCAPE

# ACKNOWLEDGMENTS


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# 1: INTRODUCTION

This Carson Civic Center Specific Plan (“CCC Specific Plan”) for the City of Carson Civic Center seeks to explore the utilization of the 20 acres of Carson Civic Center to better serve current and future community needs and expectations.

The Civic Center currently consists of:

- Carson City Hall
- Carson Community/Event Center
- Surface Parking Lots
- Open Space Areas

This CCC Specific Plan provides a strategic vision that can lead to a new Civic Center Master Plan, and a clear action plan including a financial strategy for the development of a master plan for the Civic Center through 2030 and beyond.

The CCC Specific Plan was developed in collaboration with the City of Carson staff. The Project Team identified several goals and objectives for the CCC Specific Plan. Major factors determining the ultimate uses in creating a local, regional, and international-serving destination include a theme based multi-story luxury resort hotel, a potential interactive museum, vibrant mixed-use development, a new performing art center, a modern community/event center, an abundance of indoor and outdoor gathering spaces, convention halls, outdoor theater and shopping and dining facilities.

# 1 INTRODUCTION

## 1.1. HISTORY

Incorporated in 1968, the City of Carson is located in the South Bay section of Los Angeles County. It has grown from a population of 61,000 in 1968 to 96,710 in 2022. Over the years, three annexations have increased the city's size to 19.2 square miles. Steady and continued growth has enabled Carson to become a city of regional significance.

Carson was part of a Spanish Land Grant known as Rancho San Pedro deeded to Juan Jose Dominguez over 200 years ago. During the incorporation process, the community was named after George Henry Carson, a member of the Dominguez family. "Dominguez" was a close second to "Carson" as the name for the newly incorporated city. Incorporated as a general law city on February 20, 1968, the city adopted the motto of "Future Unlimited." Its strategic location and vacant land were part of the reason for that statement of unbridled optimism. The city became a charter city by voter approval on November 6, 2018, retaining a Council-Manager form of government.

While Carson is well known as an industrial center with unparalleled access to transportation and the Pacific Rim, it is also a culturally diverse community that is an attractive place to live and work. The city has more than 120 acres of park land divided into 12 parks, 2 mini-parks and sports/recreational facilities that include 3 swimming pools, a boxing center, a state-of-the art sports complex and the Carson Community Center. These facilities allow the residents of Carson to enjoy a variety of sports, recreational and cultural programs. The city's educational needs are served by Los Angeles Unified School District, and the community has access to 47 church organizations.

## 1.2. PURPOSE OF THE SPECIFIC PLAN

The City of Carson Civic Center Specific Plan (CCC Specific Plan) is a regulatory document that builds on the aspirations of the City of Carson's General Plan to establish a clear and specific vision for the creation of a new civic heart for the city.

The goal of the CCC Specific Plan for the Civic Center is to explore potential new and exciting public and private opportunities while maintaining current civic and public uses. After review of existing facilities and input from the City staff, the Project Team developed three conceptual site plans that explore how the Civic Center could be revitalized to better meet current and future community needs and experiences. The key goals of the vision are:

- Enhance the Civic Center as the "heart" of Carson by celebrating its rich history through urban design and programming.
- Foster a vibrant downtown atmosphere that encourages daytime and nighttime usage.
- Build upon the rich and diverse collection of contributing assets and balance the needs of pedestrians, cyclists, and vehicles, including integrating adequate parking for all facilities.
- Reaffirm downtown as an attractive hub for large public events, regional arts and recreation complementary.



Carson City Hall entry plaza at the Carson Street and Avalon Boulevard junction


The Event Center in the 1970s


Entry lobby to City Hall in the 1970s


Historic aerial of Carson Street and Main Street junction

## 1.3. SITE LOCATION

Carson City Hall, located in Carson, California, serves as the central administrative hub for the City's municipal government. The City itself, officially known as the City of Carson, is situated in Los Angeles County as shown in **Figure 1-1**, within the South Bay region of the Greater Los Angeles area

The City of Carson is located in Southern California, about 16 miles south of downtown Los Angeles. Carson is bordered by the city of Long Beach on the east, and the city of Torrance on the west. The Los Angeles harbor is a few miles to the south of Carson; California's famous coastline and beaches are about 6 miles to the west of Carson.

Carson is served by three different freeways:

- The Harbor (110) Freeway, which runs north/south between the Los Angeles Harbor and downtown Los Angeles.
- The San Diego (405) Freeway, which runs north/south from Orange County through San Fernando Valley.
- The Artesia (91) Freeway, which runs east/west from Redondo Beach to Riverside County.

Our Team performed site visits, met with City staff, researched the history of the Carson Civic Center, and documented its contextual components as shown in **Figure 1-2**. The existing facilities are described below and followed by a site map (Numbered 1-9).

**Figure 1-1** CCC Specific Plan - Location within LA County

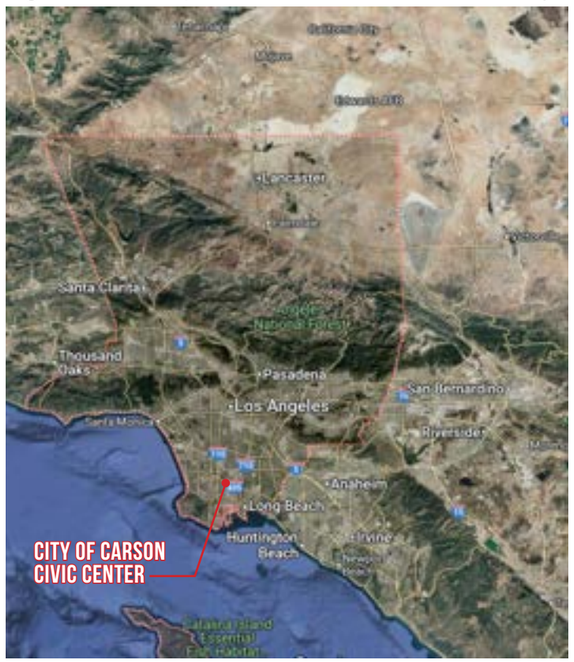
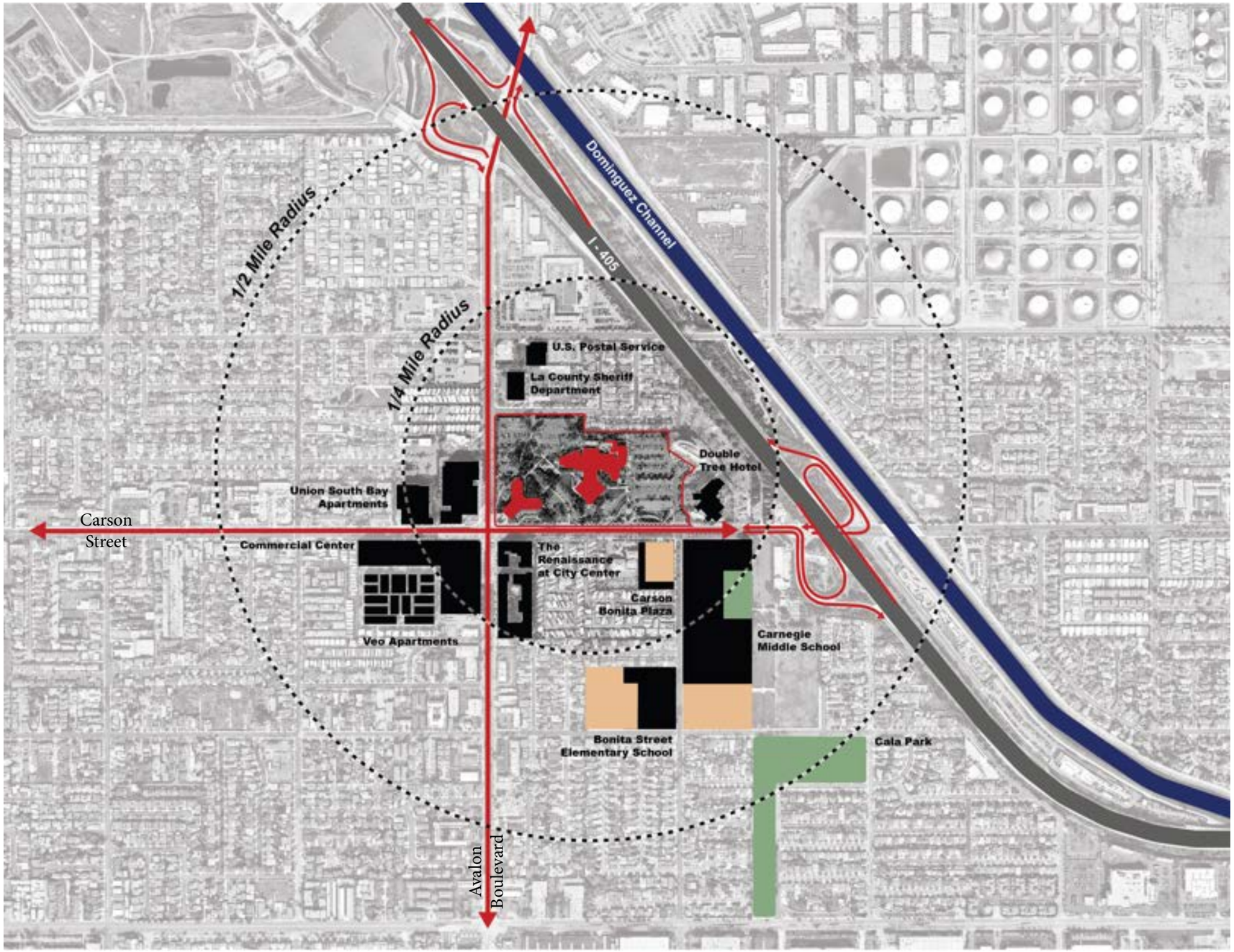


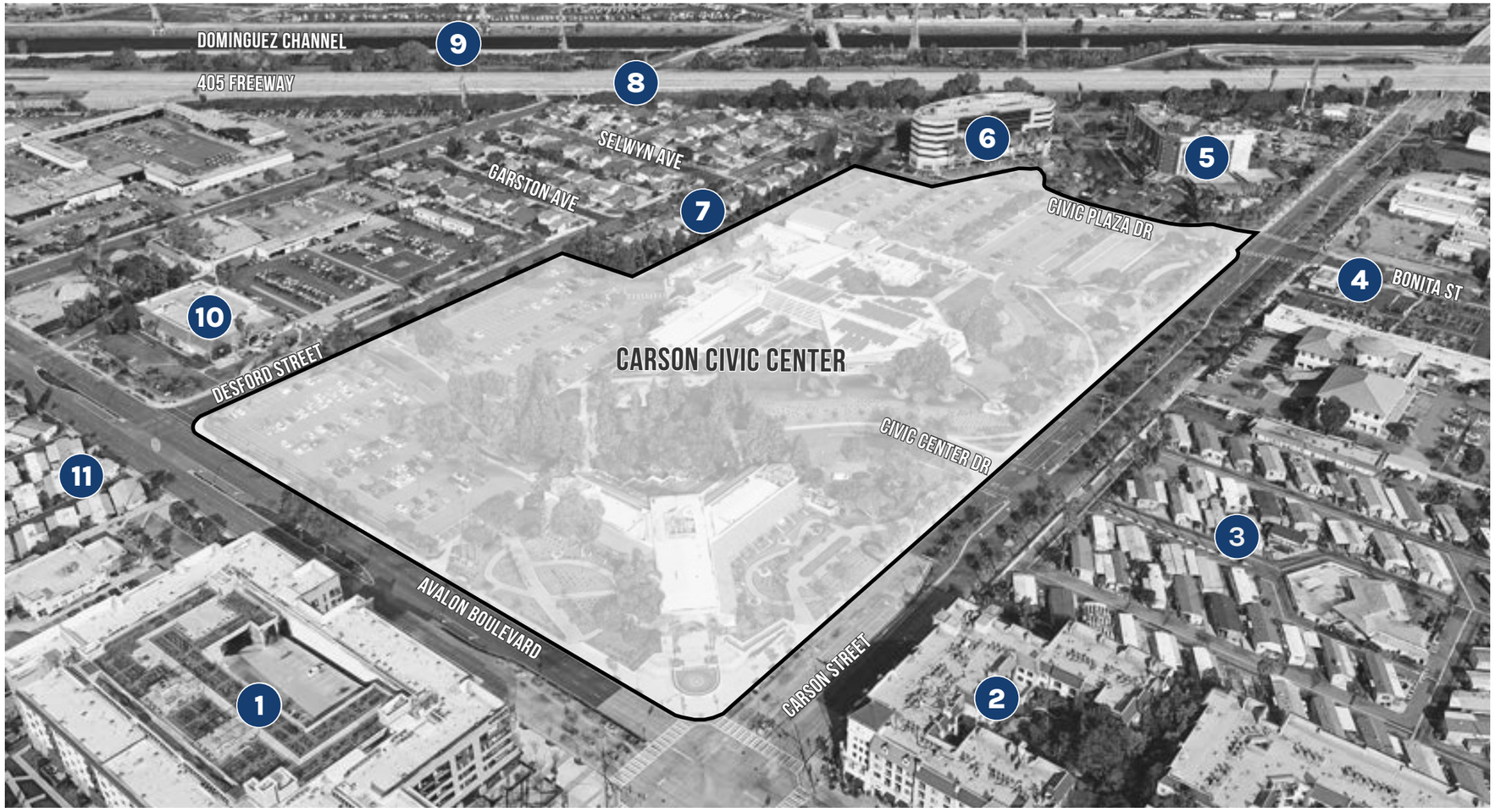

**Figure 1-2** CCC Specific Plan Area Location



## 1.4. THE SPECIFIC PLAN CONTEXT TODAY (see **Figure 1-3**)

1. **Mixed-Use Housing Development:** This mixed-use development is located west of the Civic Center, across from Avalon Boulevard. It rises five stories with ground floor retail/ restaurants and housing above. The parking is in an above-grade wrapped structure.
2. **Mixed-Use Housing Development:** This mixed-use development is located south of the Civic Center, across from Carson Street. It rises four stories with ground floor retail/ restaurants, publicly accessible courtyards, and housing above. The parking is in an above-grade podium structure wrapped with retail at the ground level.
3. **Mobile Home Community:** Located south of the Civic Center, across Carson Street, this mobile home community is comprised of single story, detached homes, with a 5-foot masonry wall marking the property along Carson Street.
4. **Middle School:** Carnegie Middle School is located southeast of the Civic Center, across Carson Street. The middle school playgrounds face Carson Street with a low masonry wall and chain-link fence lining its property along Carson Street.
5. **Doubletree by Hilton Hotel Carson**: This 225-room hotel sits between the Carson Civic Center site and the 405 freeway. The hotel amenities include fitness and recreation, dining, business and work centers, and pools.
6. **Office Building**: Located to the east of the site, this office building shares parking lots with the site.
7. **Single Family Neighborhood:** Located north of the Civic Center, along both sides of Desford Street, this neighborhood is comprised of single story, detached homes, with street-facing driveways and garages.
8. **405 Freeway:** The 405 Freeway runs north-south within a quarter-mile of the civic center site. It connects to major destinations in Los Angeles County and beyond, such as Long Beach and San Diego to the south and LAX and Los Angeles to the north.
9. **Dominguez Channel:** The Channel is a 15.7-mile-long stream in southern Los Angeles County, California, in the center of the Dominguez Watershed of 133 square miles. It runs parallel to the 405 Freeway and east of the civic center site within a quarter-mile.
10. **LA County Sheriff's Department:** Serving the areas of: Carson, Unincorporated Rancho Dominguez, Unincorporated Torrance, Unincorporated Harbor City, the Sheriff Station is located north of the civic center, across from Desford Street.
11. **Mobile Home Community:** Bel-Aire Park, located northwest of the Civic Center, across Avalon Boulevard, is comprised of single story, detached homes, with a 6-7-foot masonry wall marking the property along Avalon Boulevard.

**Figure 1-3** CCC Specific Plan Area in Context





Mixed-use housing development along Carson Street


The LA County Sheriff's Department along Desford Street


Single-family neighborhood along Desford Street

## 1.4. THE SPECIFIC PLAN SITE TODAY (see **Figure 1-4**)

1. **Carson City Hall**: Carson City Hall was opened in 1976 and provided a centralized location for city government operations, serving the needs of residents, businesses, and visitors alike. Carson City Hall represented the culmination of a broader plan to establish Carson as a community-oriented city, and it symbolized its forward-thinking optimism and desire for a more equitable future. The building, designed by a diverse team led by African American architect Robert A. Kennard, reflects Carson's multicultural identity and its transition from industrial sprawl to a planned urban center. City Hall's primary frontage faces the intersection of Carson Street and Avalon Boulevard, and is surrounded by open space, surface parking lots, and shares the civic center with the Community/Event Center.
2. **Surface Parking Lot (Northwest)**: The surface parking lot north of City Hall has approximately 1.5 acres of parking and landscaping. This lot is not accessible by Avalon Boulevard or E Desford Street. It is only accessible through Civic Center Drive.
3. **Surface Parking Lot (North)**: The surface parking lot northeast of City Hall has approximately 1.7 acres of parking and landscaping. This parking lot is accessible by Civic Center Drive and a road off E Desford Street.
4. **Carson Community/Event Center**: The Carson Community Center consists of the Community Hall, with 11,950 square feet of space and a capacity of 1,200 as well as a 30-foot high ceiling and a 1,500-square-foot lobby; an 8,170-square-foot atrium; 27,446 square feet of meeting rooms (16 in all); five patios totaling 8,201 square feet; another lobby, measuring 1,100 square feet; and two lounges totaling 2,524 square feet. The Carson Event Center offers 40,000 square feet of versatile meeting and event space and audio visual services which are booked 6+ months in advance. There are additional entities that wish to use the space, but it is not big enough and does not have the necessary amenities. The Community Center also include the Dominguez Room to the northeast of the building which holds events such as senior programs and other gatherings.
5. **West Surface Parking Lot**: The surface parking lot northeast of City Hall has approximately 4.2 acres of parking and landscaping. This parking lot is accessible by Civic Plaza Drive and a road off E Desford Street. To the north of the parking lot, the City installed 20 Tesla V3 Charging Stations.
6. **Civic Center Drive**: This roadway runs north-south next to City Hall, and parking lots. There are drainage/flood issues at the dip under the bridge. The Sheriff uses the street to pass through and the employees and visitors of the site use this street to access the parking lots.
7. **Civic Plaza Drive**: Civic Plaza Drive runs north-south next to the east parking lot, an office building, and the DoubleTree Hotel.

**Figure 1-4** CCC Specific Plan Area Site





City Hall walking paths along Avalon Boulevard


City Hall entry along Civic Center Drive


The Event Center banquet hall

## 1.6. RELATIONSHIP TO OTHER PLANS

**The 2040 General Plan (2023)** builds upon the community's shared vision for the future:

*"Carson in 2040 is a vibrant, diverse, and energetic place that embraces technology, creativity, and innovation. Residents have access to quality jobs, housing, education, services and a fiscally-sound government. Businesses have access to infrastructure, investment, workforce training, and a collaborative environment. The community is filled with thriving neighborhoods and strategically located new development with inviting spaces for working, living, learning, dining, gathering, and recreation."*

Guiding Principles include:

- Promoting vibrant, safe, and walkable mixed-use districts and neighborhoods, and revitalized corridors.
- Provide a diverse array of housing types to meet the needs of all segments of the community.
- Encourage development of regional-scale destinations, as well as neighborhood-serving retail and amenities.
- Promote development of a cohesive open space system.
- Enhance the public realm and promote quality design.
- Emphasize a diversity of transportation modes and choices.

The **Carson Municipal Code and Zoning Ordinance** is an important tool for implementing the General Plan proposals on privately-owned sites and should be updated to be consistent with the General Plan once the plan is adopted by the City. The Zoning Ordinance, adopted in 2024, provides permitted land uses and development standards for each category of land use. In addition to zoning designations, specific plan and overlay areas are governed by unique detailed land use regulations. As with the General Plan, zoning designations do not always coincide with existing land uses and development intensities as built. Carson's Zoning Ordinance only applies within City Limits. A Phase II Zoning Code Update is expected to be adopted in September 2026.

The **2006 Carson Street Mixed-Use District Master Plan** is intended to achieve the vision of "the creation of a distinct district along the Carson Street corridor with a 'main street' character, featuring a unique pedestrian-friendly mixed-use environment." The plan contains a series of recommendations, design guidelines, and implementation strategies intended to encourage economically feasible development along Carson Street. The plan focuses on a nearly two-mile section of Carson Street between I-405 and I-110. Since the plan was adopted, the City has implemented or is in the progress of implementing several of the plan's recommendations, including bicycle lanes, signage, gateways, and mixed-use development.

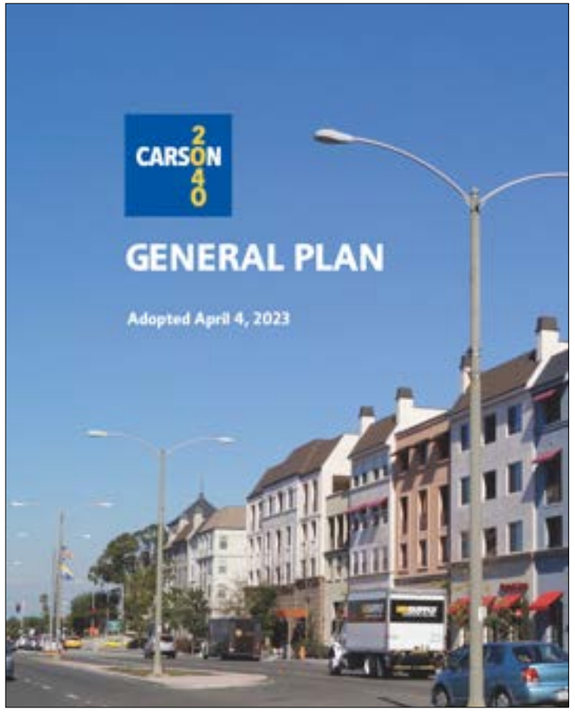
The **2013 Carson Bike Master Plan** is intended to achieve the vision of "the creation of a distinct district along the Carson Street corridor with a 'main street' character, featuring a unique pedestrian-friendly mixed-use environment." The plan contains a series of recommendations, design guidelines, and implementation strategies intended to encourage economically feasible development along Carson Street. The plan focuses on a nearly two-mile section of Carson Street between I-405 and I-110. Since the plan was adopted, the City has implemented or is in the progress of implementing several of the plan's recommendations, including bicycle lanes, signage, gateways, and mixed-use development.

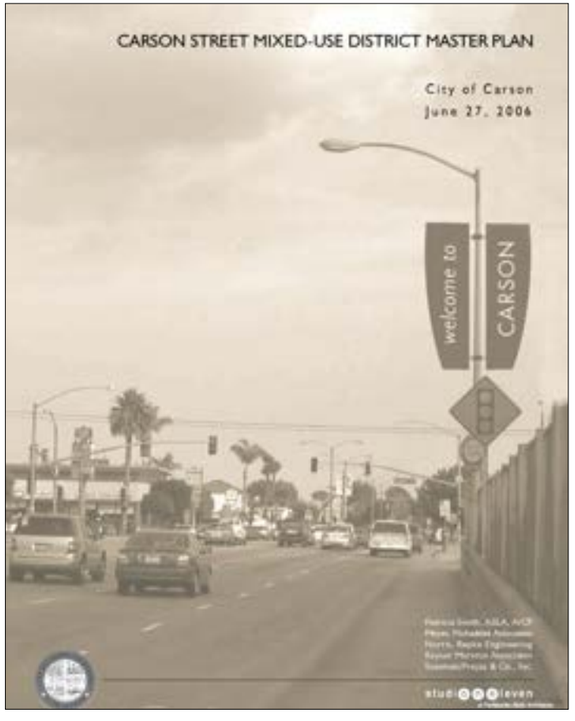
The **City Hall Historic Structure Report** was prepared as an educational tool to inform the public about the background, design, and development of Carson City Hall and its importance to the history of Carson. The historic structure report (HSR) documents the building's history, significance, and existing conditions. The project was made possible through funding provided by the National Trust for Historic Preservation's Conserving Black Modernism Grant program, available through the African American Cultural Heritage Action Fund. The Story Map provides an overview of the history of Carson and how the construction of Carson City Hall reflects the development of the community after incorporation.

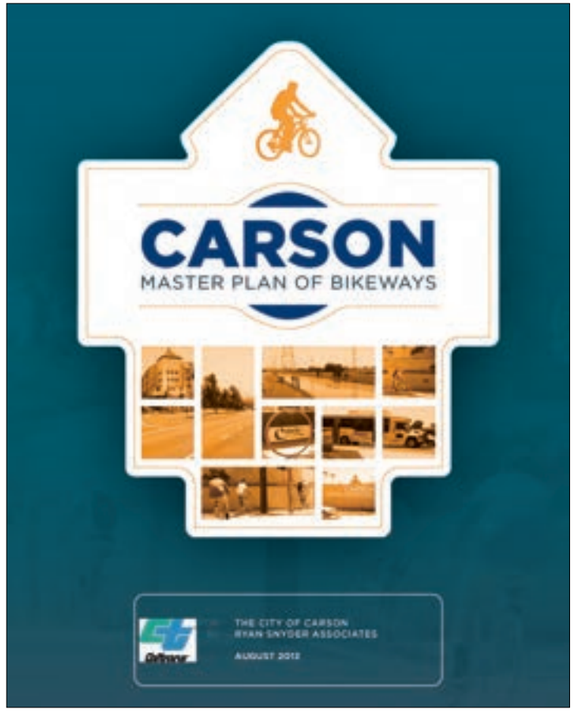
The **2017 City of Carson Climate Action Plan (CAP)** serves as a guide for action by setting Greenhouse Gas (GHG) emission reduction goals and establishing strategies and policy to achieve desired outcomes over the next 20 years. The CAP summarizes existing sustainability efforts and sets reduction measures across five broad categories—land use and transportation, energy efficiency, energy generation and storage, solid waste, and urban greening.

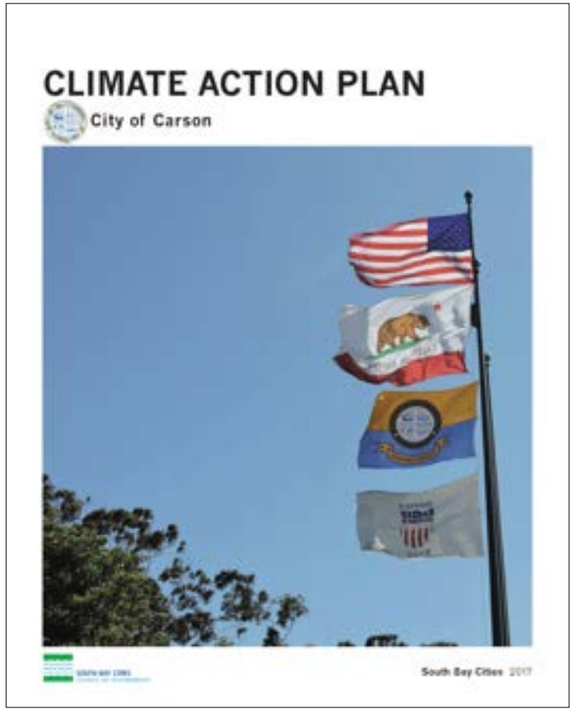
Other **City of Carson Specific Plans** include the following Specific Plans adopted in the last 5 years, within the immediate vicinity of the Carson Civic Center:

- The Avalon Specific Plan (2015)
- District at South Bay Specific Plan (2022)
- Imperial Avalon Specific Plan (2022)



## 1.7. PLAN AUTHORITY

The Carson Civic Center Specific Plan (CCC Specific Plan) is a regulatory plan that implements the goals and objectives of the City's General Plan. It establishes a clear and specific vision for the future of the study area to enable the City to reshape the public and private realms according to that vision. The California Government Code authorizes cities to adopt Specific Plans under Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457. Specific Plans may be adopted by resolution, becoming policy, or by ordinance, becoming regulation. Public hearings before the Planning Commission and City Council are required before adoption.

This CCC Specific Plan constitutes the guiding document for all development standards and zoning for all properties within the study area. The Development Standards (see Chapter 3) replaces the current zoning designations and standards for the study area with customized standards designed to deliver development consistent with the City's and community's integrated vision. Development plans or agreements, tract or parcel maps, or any development of land use approval requiring ministerial or discretionary actions must be consistent with the CCC Specific Plan which itself is consistent with the General Plan.

## 1.8. GENERAL ADMINISTRATION AND INTERPRETATION

The design review process implemented through the Planning Department is supported by the City's Planning Commission.

Two basic procedures are specified for the review of projects:

1) Planning Commission approval; 2) Parcel Map or Tract Map approval by the Planning Commission and City Council for any project requiring the creation of lots.

Planning Commission approval shall be obtained in accordance with the provisions of the Carson Municipal Code. The Board may approve, modify, conditionally approve, or deny said application.

The Planning Commission may require additional studies or development provisions at the time of site plan review for individual projects. Recommendations may include detailed noise, vibration and/or odor studies and incorporation of specific design features to ensure compatibility between different land use types.

Prior to the creation of any lots, a tentative parcel or tract map shall be processed in accordance with the provisions of the Carson Municipal Code. The Planning Commission may approve, modify, conditionally approve, or deny said application.

## 1.9. AMENDING THE PLAN

The CCC Specific Plan may be amended at any time in the same manner and process by which the CCC Specific Plan was originally adopted. An amendment or amendments should not require a concurrent General Plan amendment unless by determination of the Planning Director, or if the General Plan goals, objectives, policies, or programs would be substantially affected by the proposed change.

The addition of new information to the CCC Specific Plan that does not change the effect of any concepts or regulations may be made administratively by the Planning Director, subject to appeal to the Planning Commission.

## 1.10. UNSPECIFIED STANDARDS

For any other issue, development standards, design guideline, and/or regulation not addressed or otherwise specified in this Specific Plan, the provisions of the Subdivision Regulations and Zoning Regulations shall apply. In cases of uncertainty, the Zoning Administrator shall be authorized to determine if a development standard or other regulation not specified in this Plan shall apply. The applicant/project proponent may appeal the Zoning Administrator's interpretation to the Planning Commission for review.

## 1.11. ENVIRONMENTAL REVIEW AND CEQA

The Environmental document for this document will be an Addendum to the Environmental Impact Report (EIR) prepared for the City of Carson's 2040 General Plan Update.

The Environmental document will also evaluate a 300,000-square-foot entertainment/retail center alternative at the hotel site within the CCC Specific Plan area.



Carson City Hall

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# 2: THE PLAN

Prior to the development of the CCC Specific Plan, the Project Team developed a vision for the Civic Center through three design alternatives to explore potential solutions to constraints and opportunities described in this chapter. Two initial design alternatives were developed and reviewed by the City. Each of the design alternatives contained similar components of roughly equal size/square footage; for instance, each alternative included an improved (new or remodeled) City Hall and Civic Center; mixed-use developments; additional housing; and landscape and streetscape improvements. The alternatives also explored different layouts with key facilities relocated near one another, connected by open space and pedestrian paths.

A final design alternative was created by combining the most attractive options in the two initial alternatives. The preferred design alternative is described in detail in this chapter.

## 2.1. GOALS & OBJECTIVES

The CCC Specific Plan's goals for the Civic Center included potential new public and private opportunities while maintaining civic and public resources. The preferred concept plan explored a revitalized Civic Center to with the following preliminary objectives:

- Be a beacon of the future for the City of Carson.
- Enhance the Civic Center's sense of place as the "heart" of Carson.
- Foster a vibrant downtown atmosphere.
- Build upon the Civic Center's rich and diverse collection of contributing assets.
- Balance the needs of pedestrians, cyclists, and vehicles, including integrating adequate parking for all facilities.
- Reaffirm downtown as an attractive hub for large public events.
- Establish a regional arts and recreation magnet.
- Build a high-rise theme resort hotel at the 4.3-acre site that will serve the main destination.
- Construct a multi-story mixed use residential facility, performing arts center, and interactive museum.
- Preserve the existing City Hall as a potential museum to honor its historic contribution to the Carson community.
- Provide a new City Hall with a multi-story mixed use building.
- Revitalize the Carson Community/Event Center, including the addition of a new amphitheater.

The following goals spell out the key refined CCC Specific Plan aspirations behind the vision for this project. Taken together, they reveal a series of ideas that seek to make the future of the Carson Civic Center as a vibrant daytime and nighttime destination. They pursue progressive ideas such as mixing uses and encouraging multi-modality to ensure that the debacles of single-use urban sprawl planning are not repeated. They also aspire to ensure that this CCC Specific Plan guides an incrementally implementable vision that can be developed over time and that can adapt to shifting market or programmatic demands.

### 1 - AN ICONIC CIVIC CENTER



An Iconic Civic Center – The vision and design of the new Civic Center will impart a new regional identity to the City. Through its bold urbanism, open space design and architecture, it will create a place that is distinct in its character and style from any other within the city.

### 2 - A VIBRANT PUBLIC REALM



A Vibrant Public Realm – The Civic Center will be organized around a carefully designed continuous network of plazas, greens, streets and walkways. Through their design and landscape details, each of these spaces will become enduring places for communal activity together making a verdant and vibrant public realm.

### 3 - A MULTIMODAL PLACE



A Multimodal Place – The Civic Center will allow for the seamless coexistence of multiple modes of mobility and transportation – from pedestrians and bicycles to transit, cars and emergency vehicles. The design of the civic center will prioritize walkability for users and visitors.

### 4 - A MIX OF USES



A Mix of Uses – The Civic Center will not be a single-use destination. It will bring in a mix of uses that supplement civic uses with residential, retail and hospitality uses thereby activating the place as a 24/7 destination for a variety of users.

### 5 - RESPECT FOR HISTORY



Respect for History – The design of the Civic Center will pay homage to the existing City Hall building. It will be preserved and reused as a new public building and will continue to enjoy prominent visual location at the intersection of Carson Street and Avalon Boulevard. The existing Event Center will also be retained and improved.

### 6 - SUBSERVIENCE OF PARKING



Subservience of Parking – Parking within the new Civic Center will be designed to be invisible or visually subservient from the public realm. Using a variety of design strategies – from subterranean garages to lined podiums – all parking will be accommodated in a way that does not disrupt the functional or visual appeal of the public realm network.

### 7 - IMPLEMENTATION OVER TIME



Implementation Over Time – The CCC Specific Plan will be designed to be implemented over time. By creating individual parcels around an interconnected public realm network, a phased parcel-by-parcel development approach will be allowed to occur over time as required or as possible.

### 8 - CONTEXTUAL RESPONSIVENESS



Contextual Responsiveness – The Civic Center will respect its immediate context. In its massing and form, it will be compatible to sensitive adjacencies such as the single-family houses to the north. The tallest massing will be towards Carson Street creating an important visual statement as the City's new civic heart.

### 9 - ENVIRONMENTAL RESPONSIBILITY



This CCC Specific Plan aspires to several goals of Sustainable Design in both the design of its buildings and open spaces. The details of these ideas are elaborated in the pages that follow.

## 2.2. OPPORTUNITIES & CONSTRAINTS

To understand how the CCC Specific Plan's preferred concept plan was chosen, there needs to be an understanding of opportunities and constraints. **Figure 2-1** illustrates the concept analysis for the civic center's design criteria listed below, which is a result of the three alternatives studied (**Figures 2-2** through **2-4**).

1. **Existing City Hall and Community Event Center:** These two critical assets are important to the community and are to be retained and renovated. The existing City Hall is significant for its historical value and design, and both buildings offer the opportunity to continue delivering civic resources to the community.
2. **City Hall Open Space:** In order to enhance the existing City Hall, there is an opportunity to create both softscape and hardscape surrounding its grounds. Open Space allows for the community to gather, hold events, or simply to sit and rest.
3. **Visual Connectivity:** The intersection of two major roadways, Carson Street and Avalon Boulevard, provides a clear opportunity for a visual connection to the civic center from the intersection. This will support the civic center as a point of arrival and gateway to a major destination.
4. **Vehicular Connectivity**: A vehicular pattern of movement currently exists whereby Civic Center Drive and Civic Plaza Drive are utilized by the local residents and the Sheriff Department for access to Carson Street. This must be maintained but in balance with the proposed uses of the redeveloped civic center.
5. **Pedestrian Connectivity**: Currently, surface parking lots comprise the majority of the civic center site. What is envisioned for a new civic center is a "campus-like" structure that will thrive on a mix of civic, commercial and housing daytime and nighttime uses. These uses will be integrated and connected for pedestrians to easily maneuver throughout the civic center to their desired destination.

**Figure 2-1** Opportunities and Constraints

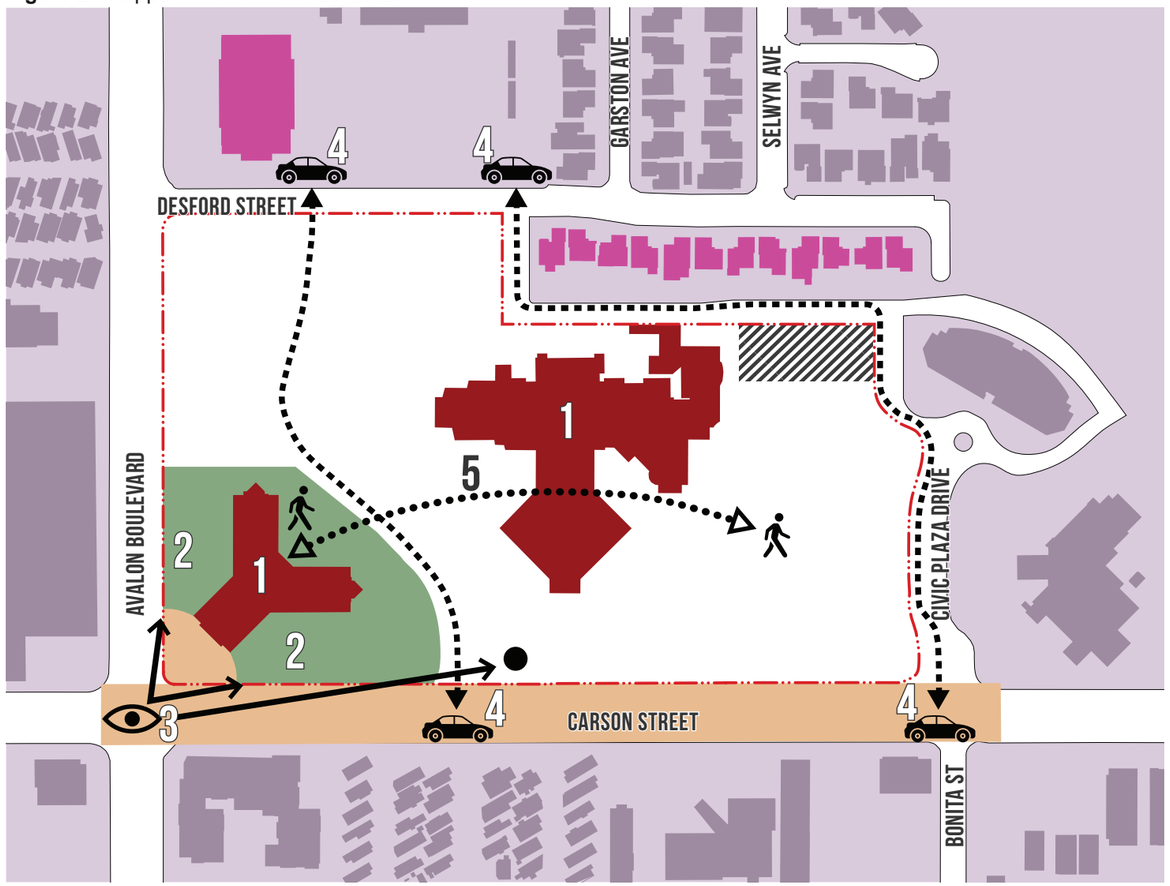



**Figure 2-2** Alternative 1




**Figure 2-3** Alternative 2




**Figure 2-4** Alternative 3 - Preferred Plan




## 2.3. CIVIC CENTER ALTERNATIVES

An initial site visit was performed to review the uses of the facilities and determine developable areas, parking needs, and potential new buildings. The following features were incorporated in the design alternatives (**Figures 2-2** through **2-4**):

**Resort Hotel.** The plan is to provide a unique, themed destination hotel to include amenities as pool decks, social gathering areas, conference rooms, landscaping, restaurants, and parking.

**New City Hall**. Early alternatives explored renovating the existing City Hall. The preferred plan resulted in a new modern mixed-use City Hall to better serve Carson's current and future needs. The new City Hall will be constructed at a prominent location along Carson Street, positioned strategically near the freeway to serve as a visible gateway to the Civic Center. Key features may include:

- A public lobby and "one-stop shop" permit service center;
- Sustainable design elements, such as natural daylighting, low-energy systems, and green materials;
- Flexible office space to accommodate evolving department needs and growth over time;
- Integration with pedestrian walkways, open space, and Jewel Plaza to encourage walkability and civic engagement.

**Preservation and Repurposing of Existing City Hall**. The existing Carson City Hall will be preserved and reimagined as a valuable civic asset that continues to serve the public, potentially accommodating:

- A civic museum or historical archive center, showcasing Carson's municipal history and community development;
- A community services or cultural resource center, offering flexible public meeting spaces and administrative support services;
- A teen center or innovation center, providing amenities like a makerspace and study labs for the community;
- A satellite office hub, maintaining a limited number of departments or functions to preserve geographic access.

**Community/Events Center**. The community center should be remodeled and enhanced to better serve current community needs. The Community Center will have improved amenities for events, additional class/program spaces, and an Innovation Center for teens.

**Housing**. Additional mixed-use housing units can complement existing developments and are proposed to the north of the site.

**Entertainment**. A performing art center and interactive museum is proposed to enhance cultural experience and bring people from all parts of California, and beyond, to the Civic Plaza.

**Parking & Roads**. Ample parking is needed for the various proposed uses and for proper circulation. Parking may have mixed use built over it to better utilize the available space. Civic Center Drive could be realigned, and the bridge removed or reconstructed.

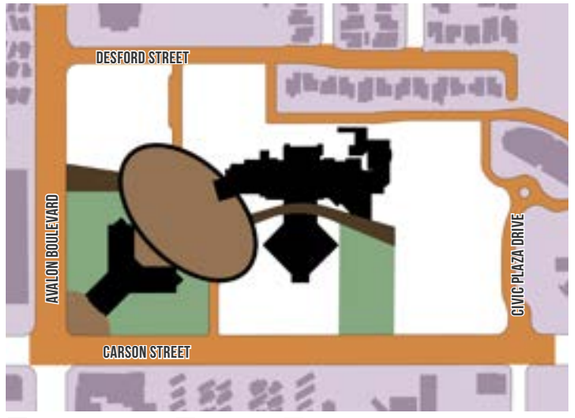
**Open Space/Walking Paths**. Ample Open Space and walking paths connecting the spaces can incorporate a jewel design to incorporate the "Jewel of the South Bay" designation of the City.

## 2.4. KEY CONCEPTS OF THE PLAN

The adjoining diagrams summarize the key concepts of the CCC Specific Plan. They each show the basic strategies and logics that guide the organization and components of the CCC Specific Plan. The pages that follow elaborate on these concepts in greater detail and explain their specific design elements and ideas.

### PUBLIC OPEN SPACE

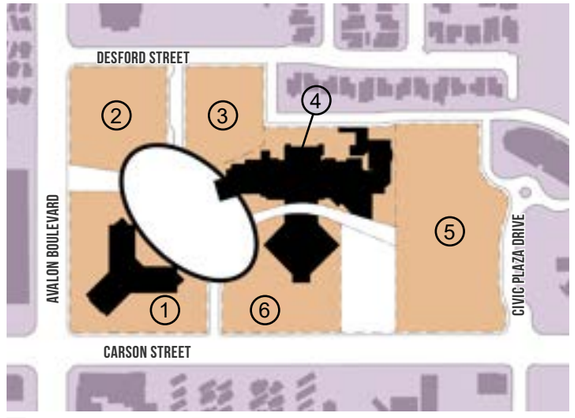
The public space network of the Civic Center is centered on the elliptical "Jewel Plaza" which will become the iconic new civic plaza of the city. Two streets to its north and south connect the Plaza to adjacent streets. Two pedestrian walks connect the Plaza due west to Avalon Boulevard and due west to a public green between the new City Hall and new hotel. The space around the existing City Hall is enhanced as a new public green.




Existing Buildings Plazas Streets
Paths Landscape

### DEVELOPMENT PARCELS

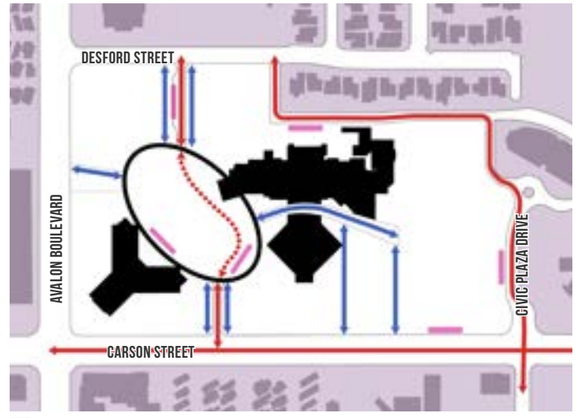
The diagram shows the organization of the six development parcels within the Civic Center: 1) Existing City Hall Parcel; 2) Performing Arts Center Parcel; 3) Housing Parcel; 4) Existing Event Center; 5) Hotel; 6) New City Hall and existing Event Center.




Existing Buildings Development Parcels

### PEDESTRIAN & VEHICULAR CIRCULATION

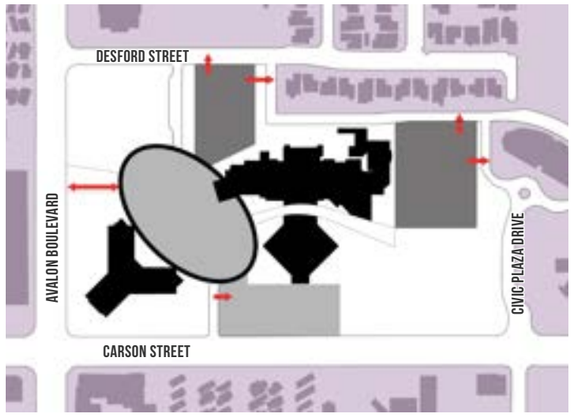
Primary vehicular circulation, including emergency vehicles will occur from the two north south streets and through the elliptical plaza. The existing road to the east and north will be retained for vehicular circulation around the civic center. Pedestrian paths as shown will connect various edges of the site.




Existing Buildings Drop-Off Area
Vehicle Circulation Pedestrian Circulation

### PARKING

Parking for public uses will be located in a subterranean garage beneath the elliptical plaza and the new civic center parcel, and also under the residential parcel. Above grade parking in the form of a single or multi-storied parking podium will be located in the residential parcel and in the rear half of the hotel parcel.




Existing Buildings Above Grade/Subterranean Parking
Subterranean Parking Parking Entry/Exit

### GROUND FLOOR USES

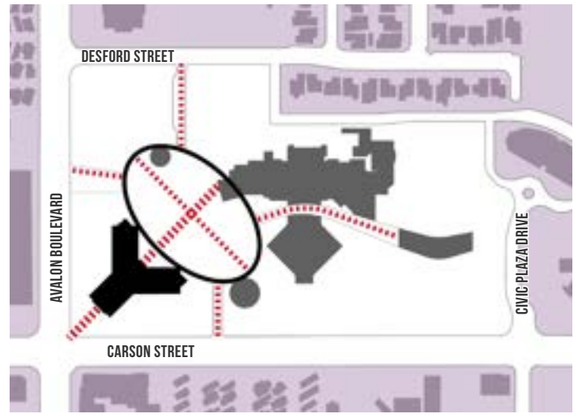
As seen in the above diagram, the central elliptical plaza will be lined will multiple ground floor uses from retail to civic programs. The eastern green will be lined on both sides by retail uses to help activate the space.




Plazas Streets Hospitality
Residential Retail

### GEOMETRY & PLAN STRUCTURE

The diagram below shows the geometry logic of the design which is informed by the historic City Hall. The symmetry axis of the existing City Hall building forms the short axis of the elliptical Jewel Plaza. The long axis of the Jewel Plaza terminates into the new City Hall to the southeast and the Performing Arts Center to the northwest. The streets and pathways form a radial pattern around the central plaza.




Main Structure Structures Axes

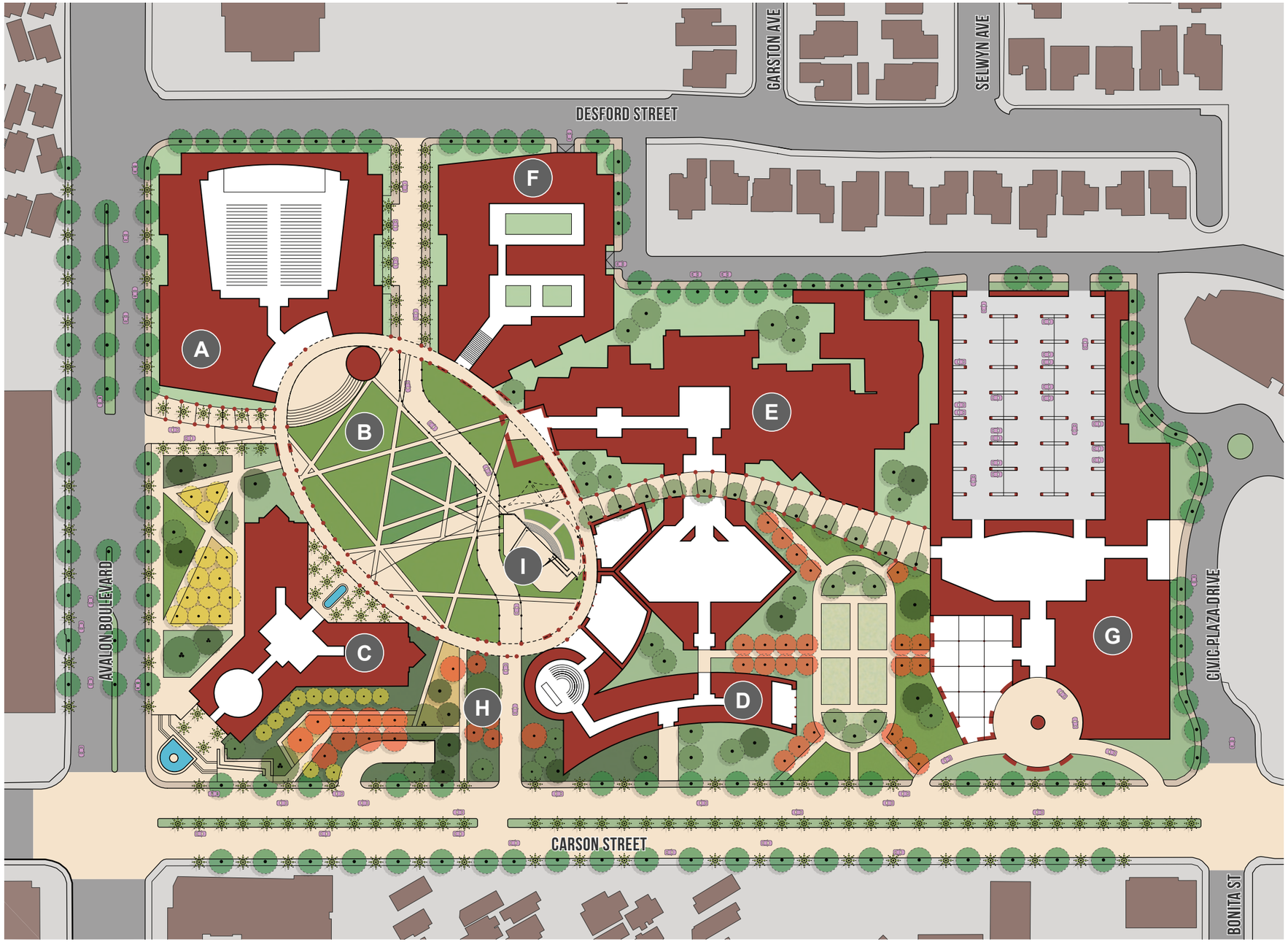
## 2.5. THE PLAN

**Figures 2-5** through **2-7** show the CCC Specific Plan for the Civic Center. They depict a hypothetical rendition of what the full and eventual build-out of the site would be. They show the disposition of the public realm network with all its components and the development of the parcels into buildings. While the specifics of this Vision Plan may change as the project is implemented, the key moves of this vision, as outlined in this drawing and the Development Code, shown later in this document, will guide the project.

The open space in this drawing is shown with overall details such as basic pathways, and hardscape versus softscape areas. These are Vision only and may change as the landscape for this project is detailed. The intent here is to show where and to what degree open space within the site needs to be detailed.

The Plan shown in **Figure 2-5** purposefully shows a hypothetical ground floor version of the build out. In each building, the publicly accessible portions of the building are shown as hallowed out white color-coded spaces, and the private internal portions of the building in dark red. Frontage and transitional elements such as colonnades, arcades and porticoes are also depicted to help one understand where such elements may be considered.

**Figure 2-5** The Plan




**A** - New Performing Arts Theater
**B** - New Jewel Plaza
**C** - Existing City Hall
**D** - New City Hall
**E** - Existing Event Center
**F** - New Mixed-Use Housing
**G** - New Hotel
H - Civil Rights Garden
I - Existing Amphitheater

1”=150’
0’ 150’
N

**Figure 2-6** Preferred Plan - View Looking Northeast

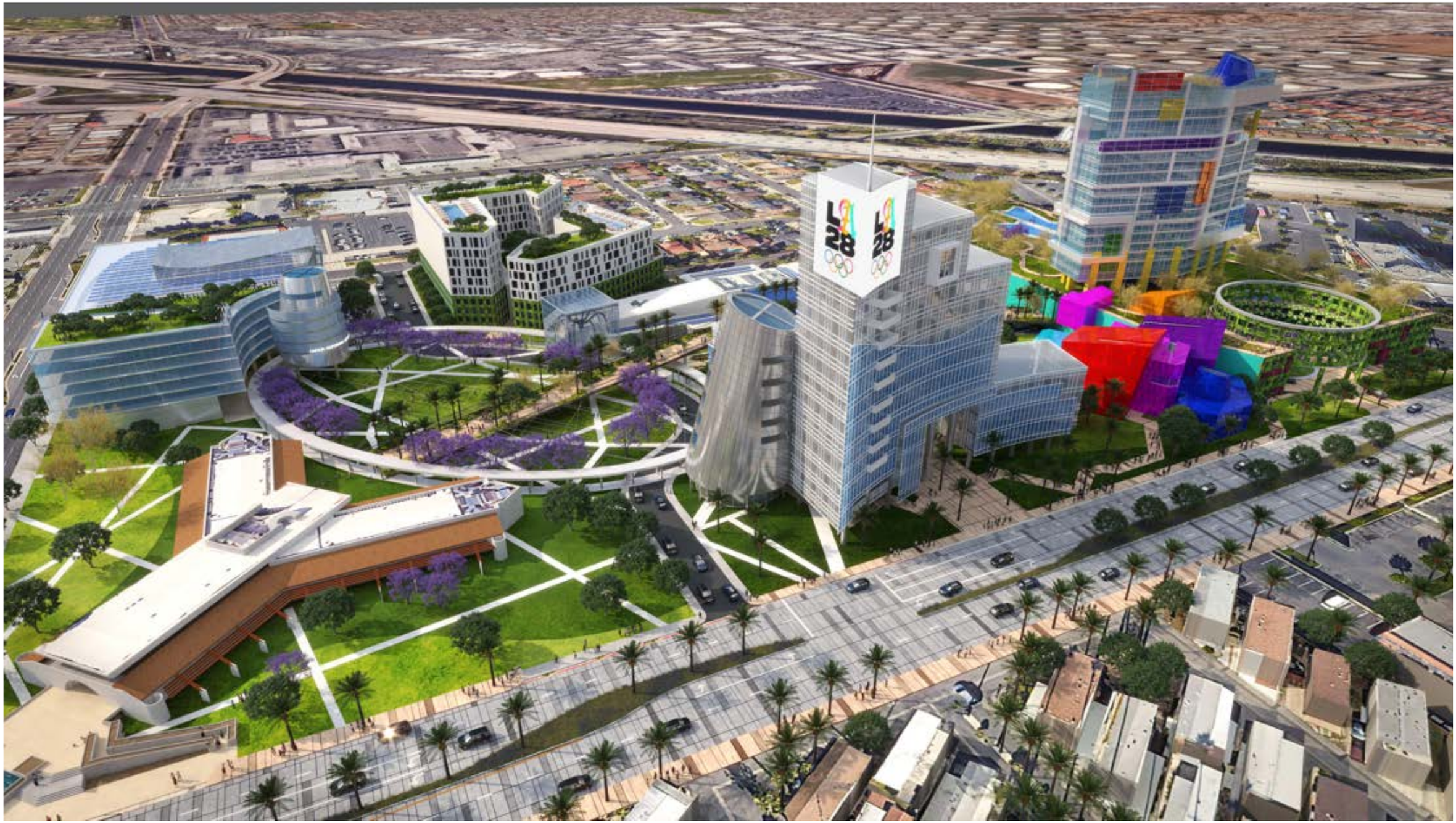


**Figure 2-7** Preferred Plan - View Looking Northwest

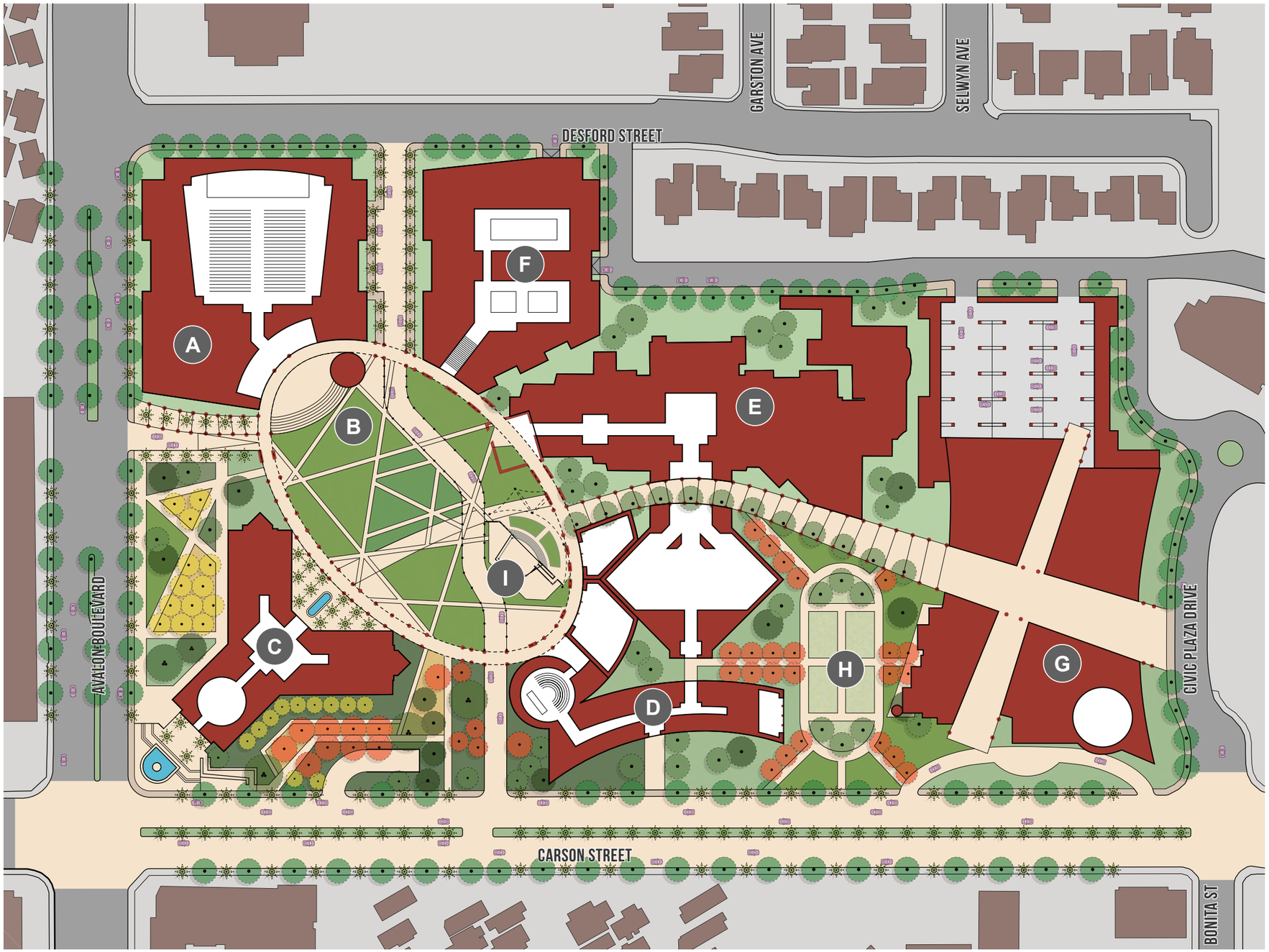


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## 2.5. THE PLAN ALTERNATIVE

The adjoining drawing shows an alternative hypothetical rendition of what the eventual buildout of the site will be. The difference between this version and the previous one lies in the redesign of the hotel parcel to the east of the site. This parcel is shown here as an entertainment/retail complex with access from a dropoff area along Carson Street, as well as a secondary access from Civic Plaza Drive.

**Figure 2-X** The Plan




**A** - New Performing Arts Theater
**B** - New Jewel Plaza
**C** - Existing City Hall
**D** - New City Hall
**E** - Existing Event Center
**F** - New Mixed-Use Housing
**G** - New Entertainment/Retail Complex
H - Civil Rights Garden (Alternative Location)
I - Existing Amphitheater

1”=150’
0’ 150’
N

**Figure 2-6** Alternative Plan with Entertainment/Retail Complex - View Looking Northeast



**Figure 2-7** Alternative Plan with Entertainment/Retail Complex - View Looking Northwest



## 2.6. COMPONENTS OF THE VISION PLAN

The following two pages break down the Vision Plan into its major individual Components to offer greater clarity on their intentions and key characteristics. Each of these Components represents a site-specific project with a building-open space interface.

The key Components of the Plan are described to the right.

.

### THE JEWEL PLAZA COLONNADE

In keeping with Carson being known as “Jewel of the South Bay”, the central loop in this alternative will prominently displays a Jewel shape outlined by walkways and landscaping, creating an elliptical “Tiara”. Part of whole of this parcel will have one or multiple levels of subterranean parking.

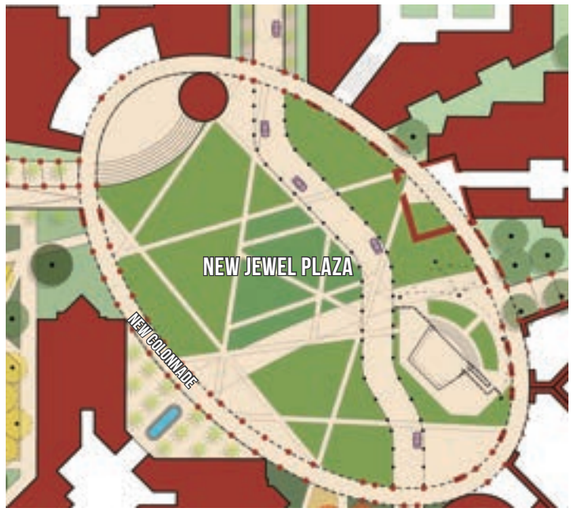
This iconic elliptical plaza is defined by a colonnade that is 15-20 feet in width and at least 15 feet tall to the underside of its roof. The roof will be flat and programmed to be a running track or area where from to look down into the plaza. The location of the roof access elevator and stairs can be designed within any of the adjoining buildings so long as it does not disrupt the integrity of the elliptical form as shown.

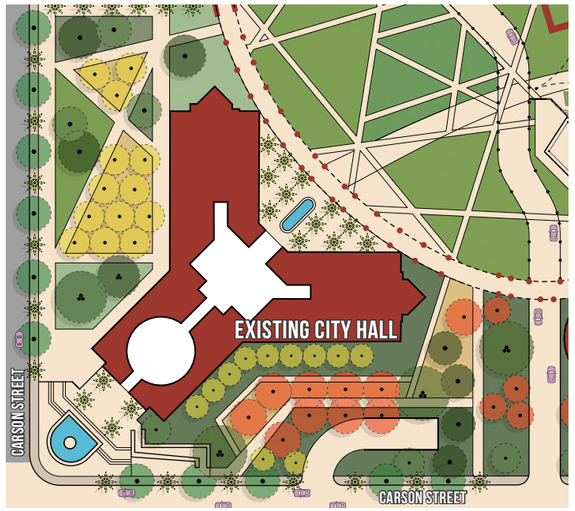
### EXISTING CITY HALL RESTORATION & REUSE

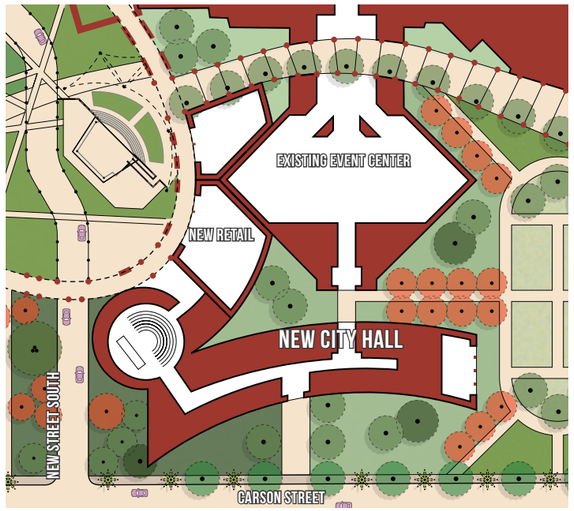
The existing City Hall building is intended to be protected, restored and reused for a new civic purpose. As the drawing shows, the open space around this building will be upgraded with new landscape ensuring that the visual prominence of this building from the street intersection is not compromised. The primary entrance of this new facility will be from the Plaza, with a secondary entry towards the street intersection if required or desired.

### NEW CITY HALL

This will be one of the tallest buildings on the site announcing a dominant civic presence from Carson Avenue. The most dramatic feature of this building will be a conical Council Chamber located towards the elliptical plaza. The rest of the facility will be in the form of a curved vertical slab building with its tallest massing towards west, stepping down towards the eastern green. The primary entrance of this building will be from Carson Avenue, with a drop off area along the elliptical colonnade of the Jewel Plaza. As seen in the drawing, the arm of this building lining the Plaza will have ground floor retail, as will the edge facing the eastern green. Part of whole of this parcel will have one or multiple levels of subterranean parking.










## PERFORMING ARTS CENTER

The Performing Arts Center, located to the northwest of the central elliptical plaza will include up to 2000 seats. The back of stage will face Desford Street with support uses facing east and west. The primary entrance of this building will be along the terminus of the long axis of the Jewel Plaza, with a drop-off for visitors along the north-south street to the east of this parcel.

## EXISTING EVENT CENTER

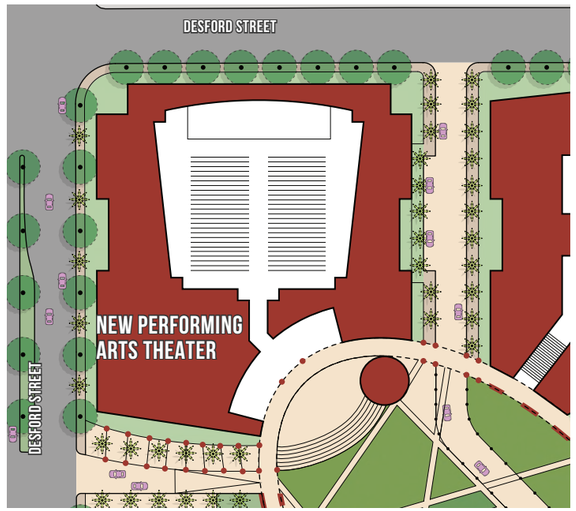
This existing building will be remodeled to better utilize the spaces. This building has two basic parts – a linear fragment consisting of art and crafts spaces and offices, and a diamond-shaped fragment with a community hall and theater spaces. The space between these two will be transformed into an open-to-sky or semi-covered walking path. The diamond-shaped assembly space will be amalgamated with the new City Hall facility. Primary access to this building will be from a new tower element punctuating the Jewel Plaza. Secondary access is from the road to the north of the building.

## NEW HOUSING

The parcel due north of the Jewel Plaza will be devoted to residential uses. The proposed residential project will consists of four (4) floors for up to 140 residential units on top of a proposed four (4) level parking garage able to accommodate up to 600 cars, including active ground floor uses and amenities along the new street and facing the Jewel Plaza. The residential center is proposed west of existing single-family homes along E Desford Avenue. The residential tower is proposed to step down adjacent to the existing homes to lower the impact of the proposed building. The residential building will be organized around one or two courtyards. All units will face either a public street, public space or interior courtyard.

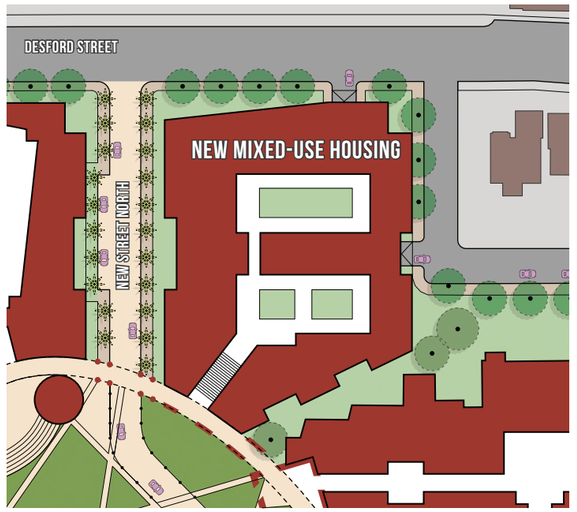
## NEW HOTEL

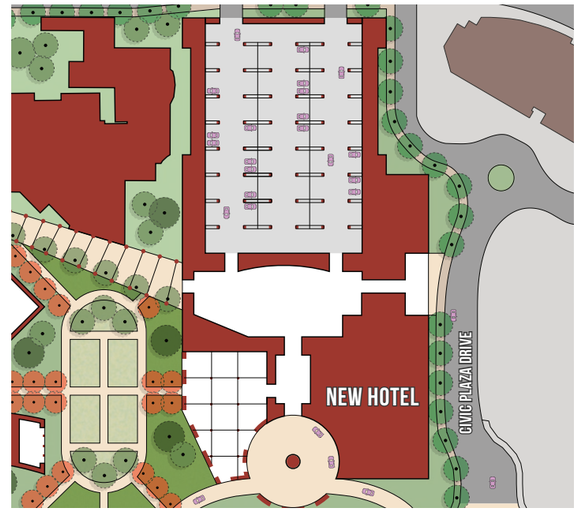
The eastern parcel on the site will be developed into a hotel. It will have up to 20 stories with 400 rooms, conference rooms, and other amenities. The slender design for this hotel provides excellent visibility to the I-405 Freeway. The primary entrance of the hotel may be from Carson Avenue or the eastern street as desired. As shown in the Development Code later in this document, there will be building height maximums towards the rear to ensure that the scale of the neighboring houses is not compromised. While the details of the hotel design will are left open ended in this plan, the following aspects are key to fulfilling the Plan's intentions: a) The tallest mass of the hotel building will be designed to visually terminate the curved east west pathway from Jewel Plaza; b) There will be retail uses facing the green to the west of the hotel; c) The rear half of the parcel will have a parking structure with an Amenity Deck above. The Amenity Deck will include recreational opportunities, restaurants, and shopping.















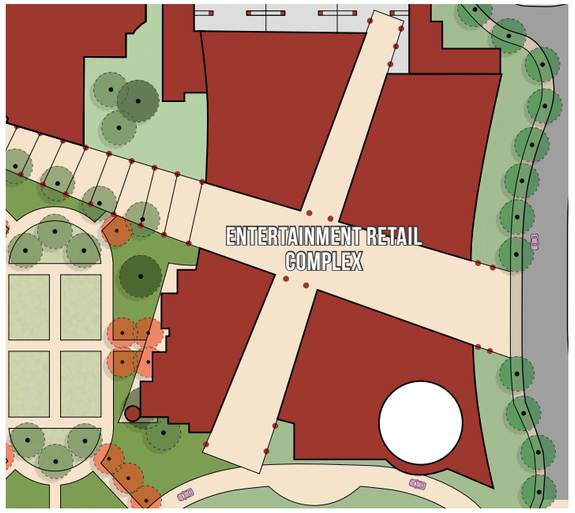



## 2.7. PLAN COMPONENTS - ALTERNATIVES

To accord additional programmatic and planning flexibility, the Plan proposes two alternatives that are summarized in the adjoining drawings. The intention of these drawings is to allow specific tenants and uses to further enhance the site through design and layout changes beyond the outlined Plan basics..

### ENTERTAINMENT RETAIL COMPLEX

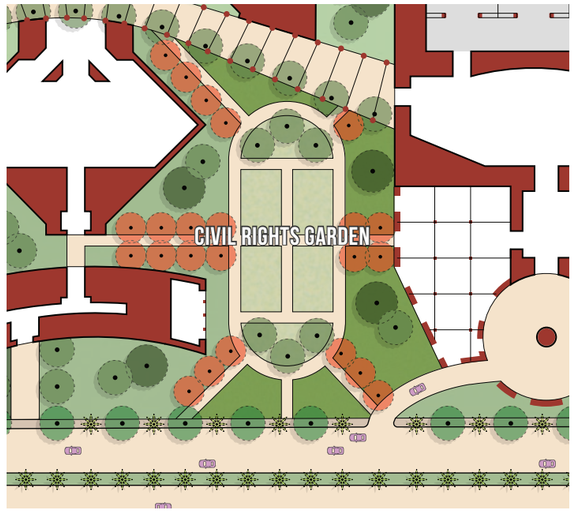
The drawing below shows an alternative for the eastern parcel of the site (Parcel 5). It shows a concept for a new entertainment/retail complex. The complex has access from the dropoff area off of Carson Street and another means of access from Civic Plaza Drive. It will be prominently visible from Carson Street and provide a draw into the area. An interactive museum can be incorporated into this complex as well.






### CIVIL RIGHTS GARDEN

The drawing below shows an alternative location for the Civil Rights Garden. The green between the new City Hall and Parcel 5 (hotel or entertainment/retail complex) can be accented with sculptures, statues, and/or art pieces commemorating the Civil Rights Movement and its key figures.






# 3: DEVELOPMENT STANDARDS

This chapter is structured to provide objective development standards applicable to the mixed-use civic parcels within the specific plan study area. The standards are intended to ensure that development for the Civic Center occurs according to the City's and community's vision of a pedestrian-oriented environment reflecting Carson's history and culture. This chapter regulates how private developments affect the public realm with regard to topics such as building placement, height, and access. These standards provide a framework for the plan area components such as:

- Attractive tree-lined streets with active frontages along major streets accessible by multiple modes of transportation;
- New and/or renovated civic buildings integrated with a pedestrian-oriented fabric of open space, public streets, and the built environment

## 3.1. OPEN SPACE STANDARDS

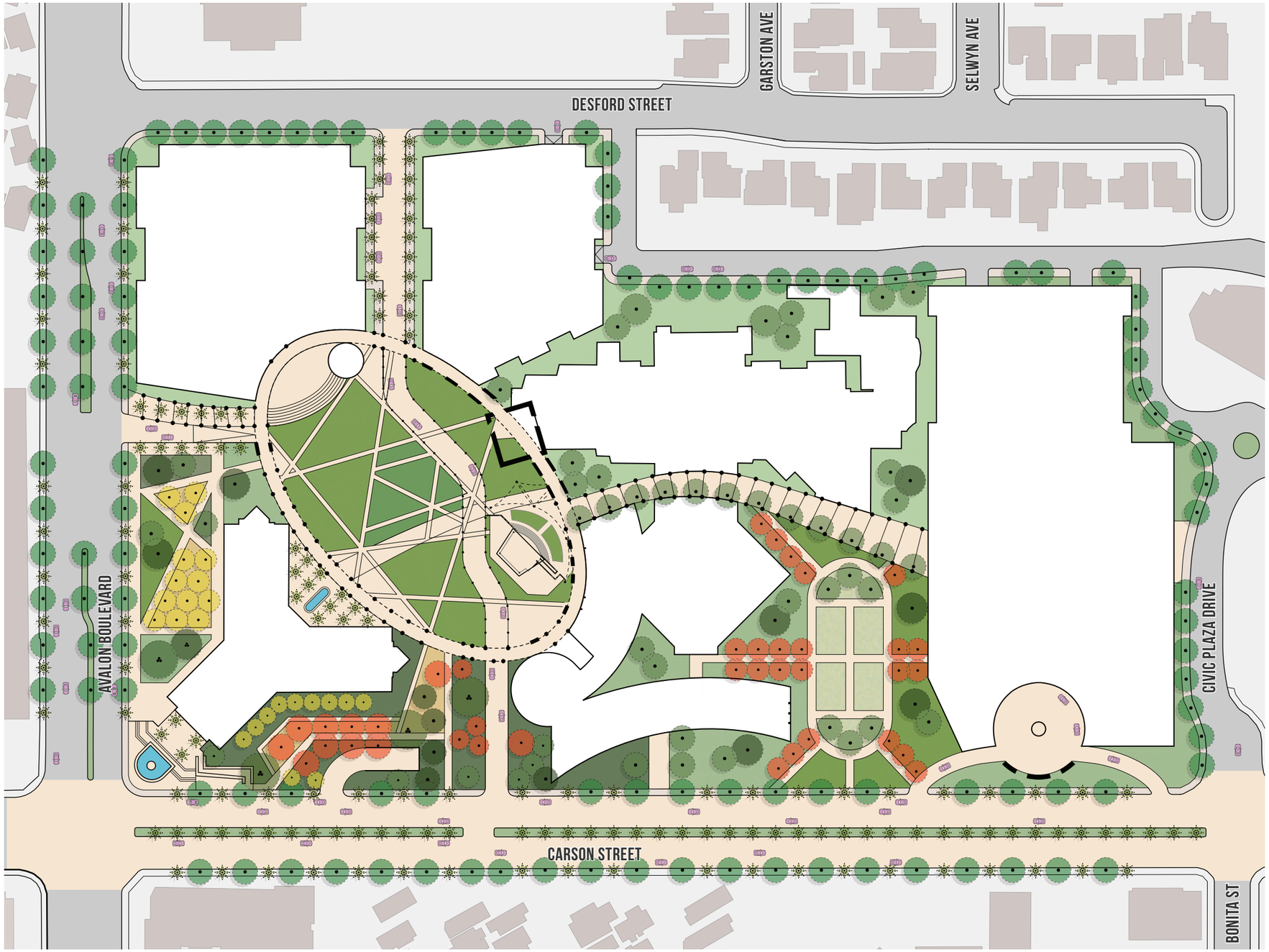
The following pages contain the regulations that will guide the design of the public realm of this project. These regulations are meant to guide the basic aspects of the open space vision for this project leaving several design details open ended. The intention of these regulations is to ensure that over time, the basic intentions underlying the design of the public realm is not compromised.

Placemaking includes providing public and private gathering and open spaces which are linked to commercial environments, transit, housing, educational, institutional, and other pedestrian-friendly and active uses. Open spaces vary in size and function - some are programmed for events to activate an area or commercial uses such as restaurants, some may be adjacent to a transit station or civic building, and others may be entirely for recreation.

Parks and other forms of open space are critical for active and healthy Commercial areas. Parks can serve as neighborhood focal points, and provide opportunities for recreation, events, exercise, and more. Another key ingredient in creating dynamic commercial areas which are connected by transit and active transportation is to create attractive and functional places that people want to be in.

**Figure 3-1** presents the integration of a network of existing and potential open spaces, as described in this section. Parks and open spaces are essential for fostering active, healthy commercial areas, serving as neighborhood focal points and venues for recreation, events, and community gathering. Creating attractive, functional private open spaces is crucial for placemaking and enhancing areas throughout the City of Carson Civic Center.

**Figure 3-1** Open Space Plan

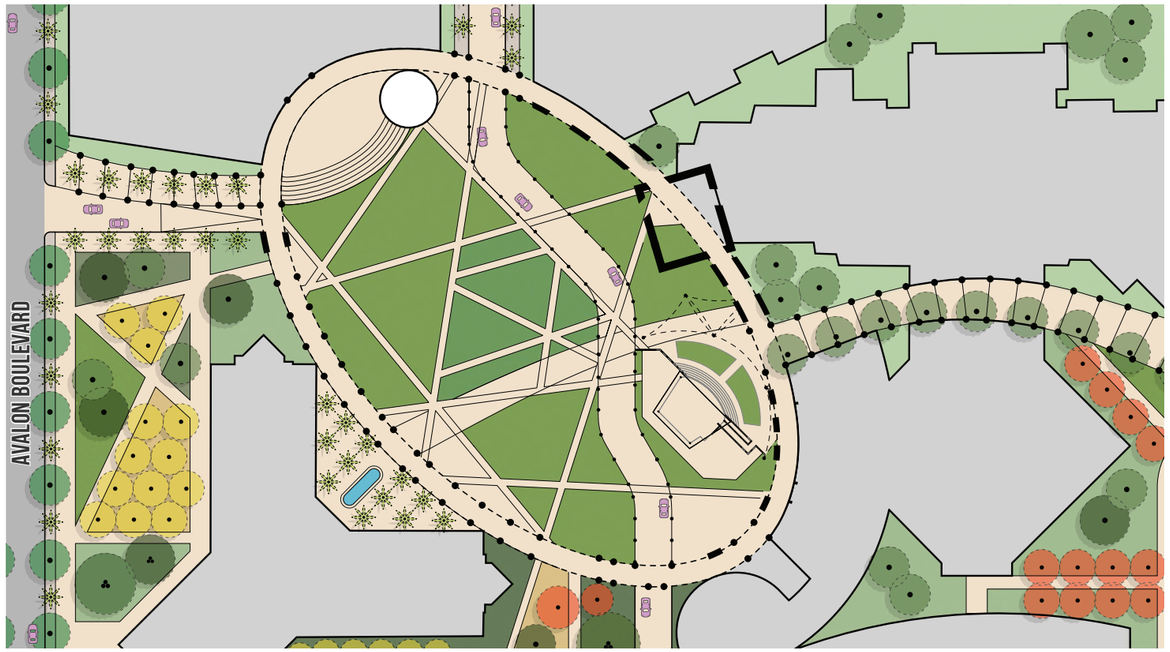


## THE JEWEL PLAZA

The following pages contain the regulations that will guide the design of Jewel Plaza as shown on **Figure 3-2**. This is the most iconic and significant public space of this project. The adjoining diagrams and notes spell out the key dimensional, figural and geometrical characteristics envisioned for this space. They offer guidance on the edges of the space and the intentions for designing the transitional structure that will define the space and create its physical boundary.

This iconic elliptical plaza is the most conspicuous and most important structuring Component of the Plan. Envisioned uses within the Jewel Plaza include community events, concerts, recreation, fairs, and farmer's markets. In its form, it is aligned on its short axis with the diagonal of the existing City Hall.  Its size along its long axis taken from its outer edge is approximately 460 feet, and along its shorter axis taken from its outer edge is approximately 280 feet.

**Figure 3-2** The Jewel Plaza








Grant Park in Chicago, IL



Piazza in Italy



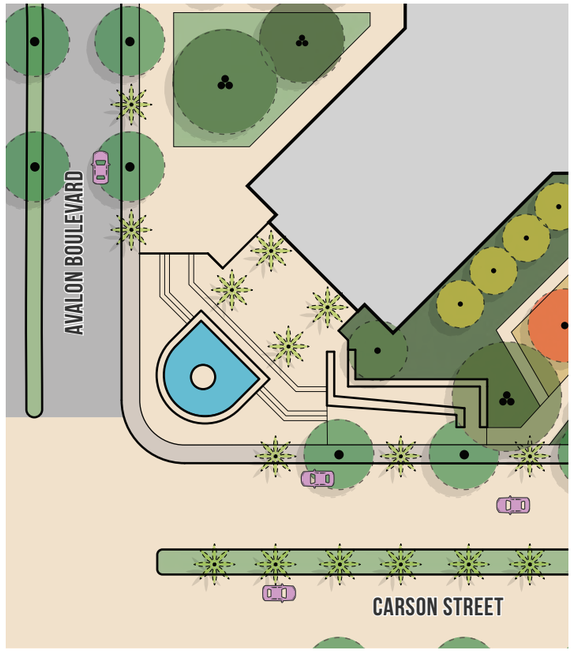
The Highline in New York, NY

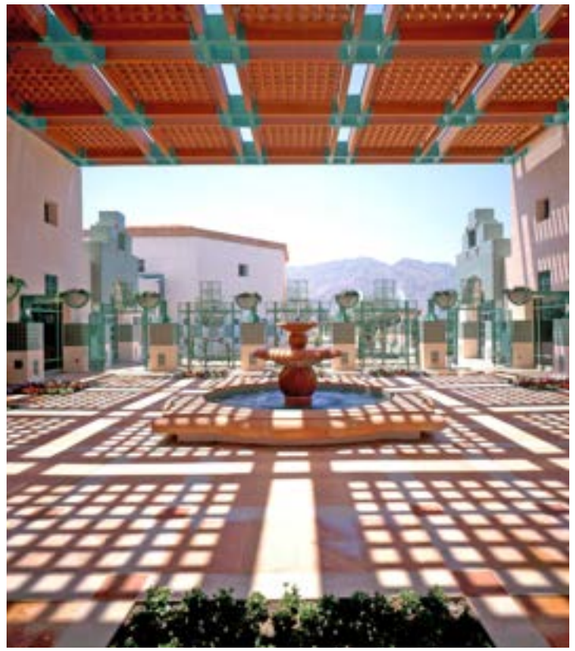
## EXISTING CITY HALL OPEN SPACES

The existing City Hall building is intended to be protected, restored and reused for a new civic purpose. As the drawing shows, the open space around this building will be upgraded with new landscape ensuring that the visual prominence of this building from the street intersection is not compromised. The primary entrance of this new facility will be from the Plaza as shown in **Figure 3-3**, with a secondary entry towards the street intersection if required or desired.

The open space around the existing City Hall, as shown in **Figure 3-4,** building will form part of its reuse into a new civic building. The envisioned function within the existing City Hall open spaces is primarily to mark an arrival to a major destination - the Carson Civic Center and historic existing City Hall. The provision of pedestrian amenities for leisure, gathering and sitting will be paramount to being complementary to the new civic building's function. This space represents an important available open space resource and amenity for this project that is different in size, scale and location from other open spaces within the Civic Center. The following diagrams and notes offer regulation towards designing this open space.

**Figure 3-3** Open Space Plan - Existing City Hall Plaza



Civic plaza and fountain at La Quinta, CA



Civic fountain at the San Diego Civic Center

**Figure 3-4** Open Space Plan - Existing City Hall Greens






Plaza and green at Santana Row in San Jose, CA



Activities, such as chess tables, provided at a plaza

## CITY HALL GREEN

This open space, as shown in **Figure 3-5**, is located between the City Hall and the Hotel, and forms an important gathering space for events that are less public than the ones within the larger Jewel Plaza. The envisioned function of the City Hall Green is to provide outdoor use for the new City Hall, the Event Center, and the Hotel such as outdoor dining, small private and/or public events, photography for special occasions, and leisure. The following diagrams and notes offer regulation towards designing this open space.

As an alternative, this green can be accented with sculptures, statues, and/or art pieces commemorating the Civil Rights Movement and its key figures.

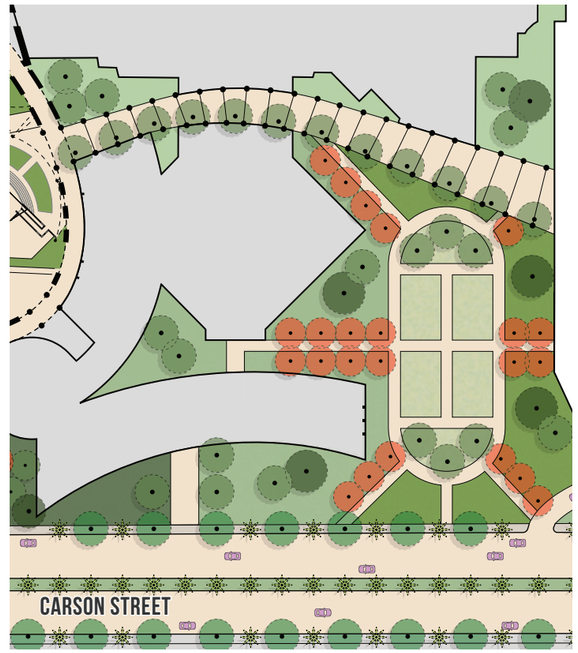
**Figure 3-5** Open Space Plan - New City Hall Green

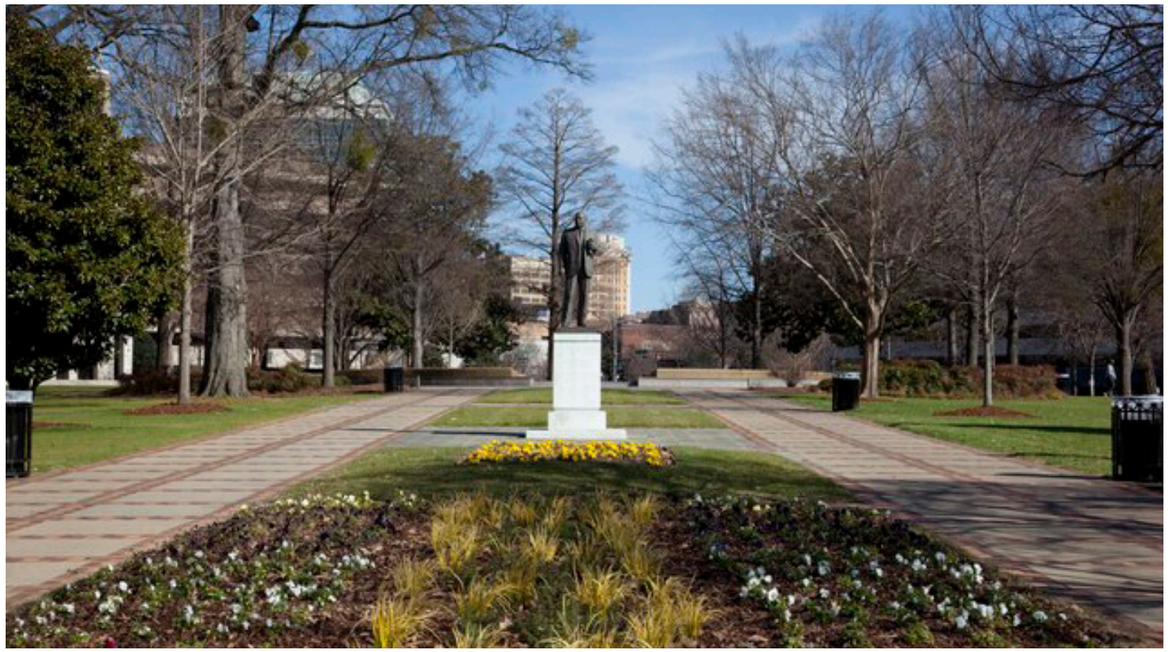



## PEDESTRIAN WALKWAY

The Walkway, as shown in **Figure 3-6**, is an important east-west linkage in this project. It connects the Jewel Plaza to the City Hall green and also becomes an important transitional space between the existing Event Center and its Community Hall. The envisioned function of the Walkway is to provide connectivity across the Civic Center while establishing an experiential space to occupy for various activities such as sitting, reading, eating, and gathering. The curved form of this walkway coupled with its landscape and paving will make this a dramatic pedestrian space within the Civic Center. The following outlines the key regulations for this space.

**Figure 3-6** Open Space Plan - Pedestrian Walkway



Kelly Ingram Park, Birmingham, AL



Pedestrian walkway at the Fontana, CA Civic Center

## CARSON STREET

The adjoining diagrams, **Figures 3-7** through **3-10**, illustrate the intended changes for Carson Street. While the travel lanes and current vehicular circulation of the arterial remains unchanged, the section of Carson Street facing the Civic Center site will be enhanced through new paving to announce the importance of this destination. New landscape will enhance Carson as visually striking and shaded corridor through the city and as the foreground to the Civic Center.

The existing Carson Street contains palm trees along its narrow 8-foot sidewalks and shade trees in the medians(see Figure 3.9). The proposed changes to Carson Street include larger sidewalks of 12 feet along the Civic Center site, along with large shade trees to alternate between the palms, to be replicated on the south side of Carson Street.

Carson Street, within the length of the Civic Center's southern boundary between Avalon Boulevard and Civic Plaza Drive, will also be covered in special paving and/or art (depicted in **Figure 3.8**), to promote safe pedestrian paths and provide flexibility to host special civic center events by street closure between Avalon Boulevard and Civic Plaza Drive. The median/turn lane will also include a pedestrian refuge at the mid-block crossing, near the front entry of the new City Hall, for pedestrian safety and mobility.

**Figure 3-7** Existing Streetscape - Carson Street



**Figure 3-8** Proposed Streetscape - Carson Street

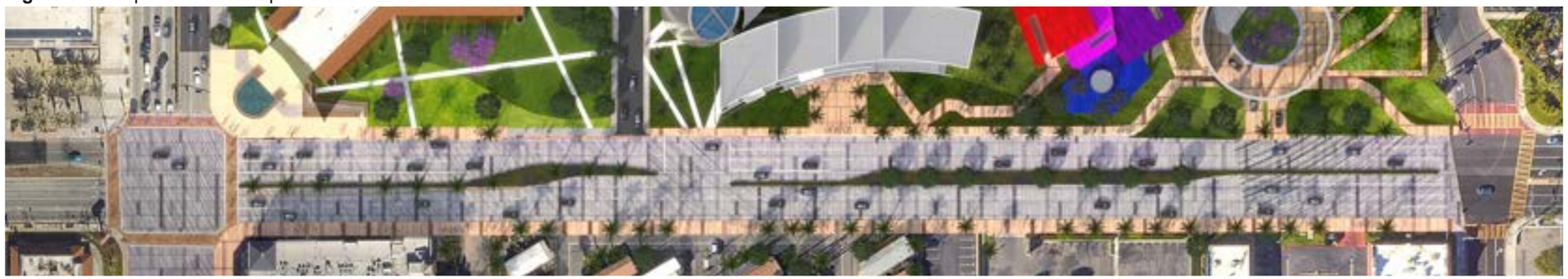


**Figure 3-9** Carson Street Cross-Section Looking East

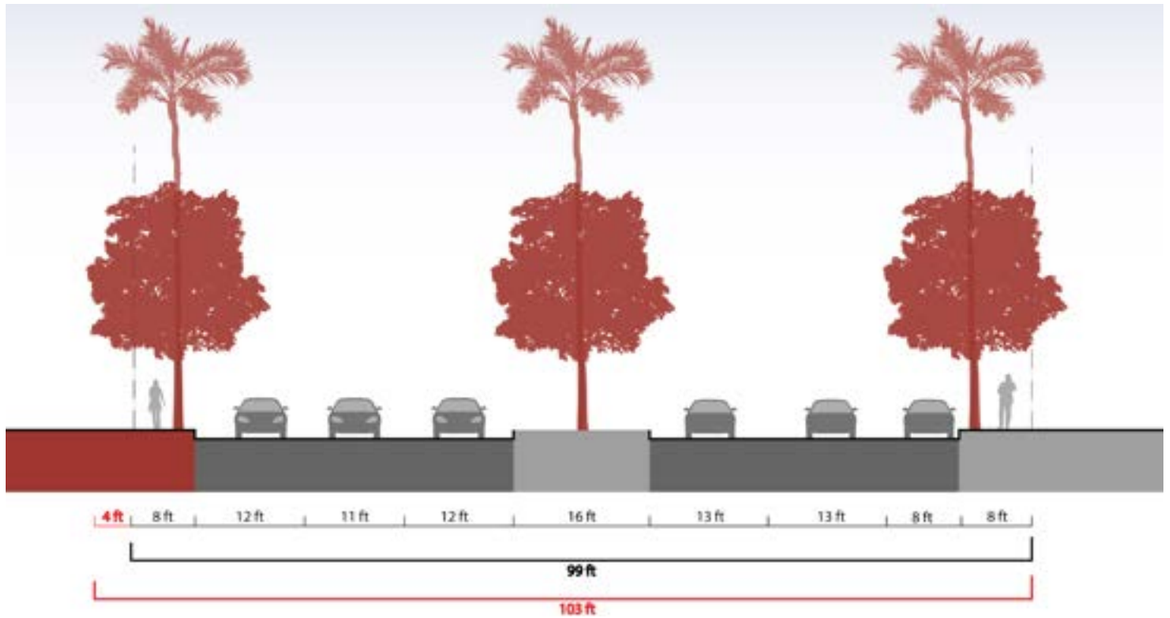


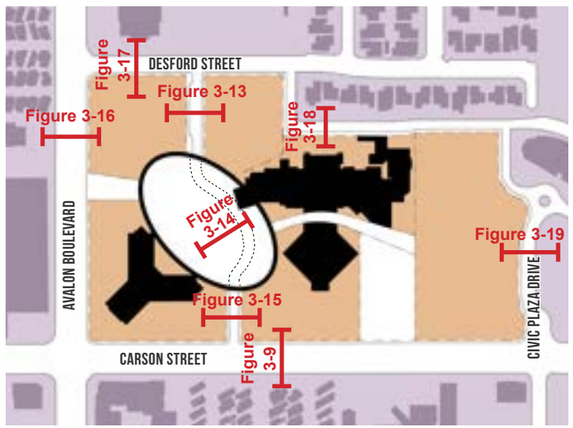

**Figure 3-10** 3D Rendering of Envisioned Carson Street



## STREETS

Streets are not just conduits for cars, but key public open spaces for all. The careful design of their form and landscape can transform them into places where vehicles and pedestrians can seamlessly coexist. The following **Figures 3-11** through **3-19** show our assessment of the streets that impact this project – both those around the site and those within. Each street section shows the existing, new, and existing to change conditions of the streets to ensure that walkability is not compromised while fulfilling the vehicular level of service required.

**Figure 3-11** Key Plan - Cross-Sections




### EXISTING TO BE REMOVED

**Figure 3-12** Civic Center Drive



### NEW STREETS

**Figure 3-13** New Street North with Parking Bay

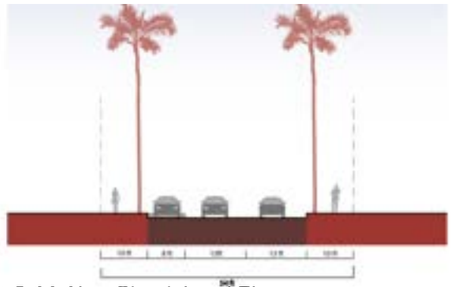


**Figure 3-14** New Street Jewel Plaza

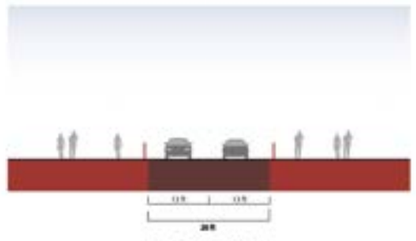
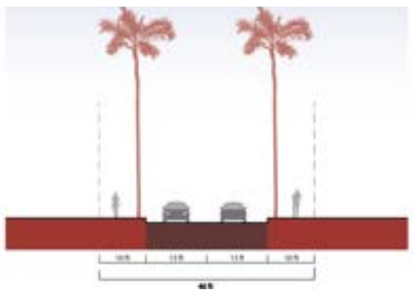


**Figure 3-15** New Street South



### EXISTING TO CHANGE

**Figure 3-16** Avalon Boulevard

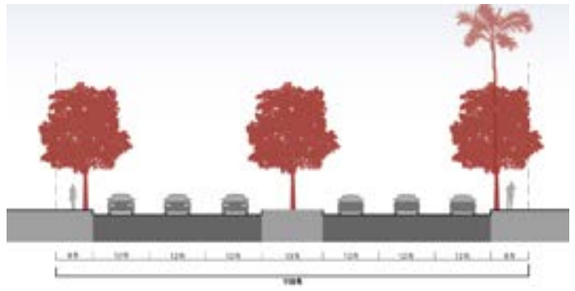


**Figure 3-17** Desford Street

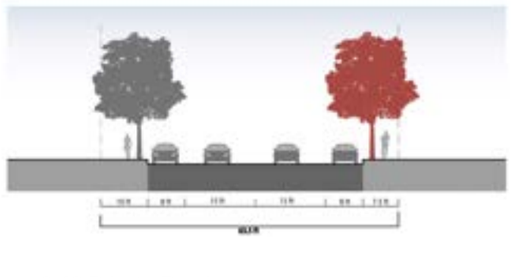


**Figure 3-18** Private Roadway

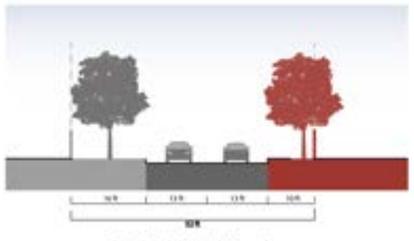
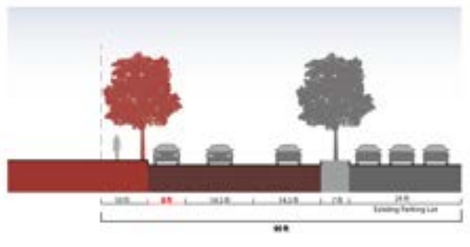


**Figure 3-19** Civic Plaza Drive





Two-lane street in a mixed-use environment



Special paving and bollards with vehicular access for events



Landscaping, paving and pedestrian amenities in a median



Landscape median with mature trees

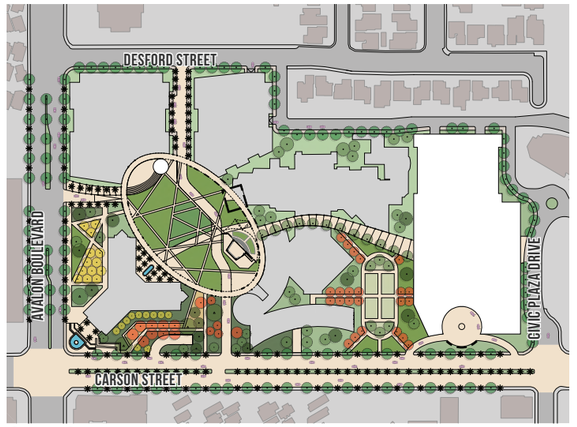
## 3.2. BUILDING STANDARDS

Building design plays a key role in the formal and spatial quality as well as the activity and safety of the area, as shown in the diagrams to the right, including **Figure 3-20** which is a critical organizing plan component showing the unifying oval gathering space framed by a pedestrian-activated colonnade and shared underground parking for the resources on the mixed-use Civic Center site. The following Building Design Standards will guide future development to respond to changing demands, allowing flexibility, while retaining the key aspects of the Plan.

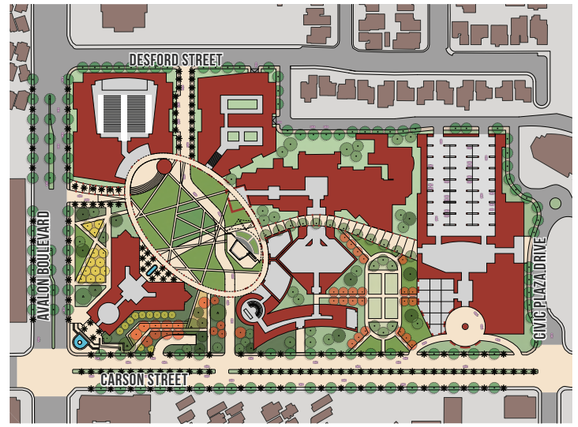
Since this project has a limited number of development parcels, each with its unique programmatic and formal specifics, the Building Design Standards are organized per individual parcel. Each of the 7 pages that follow elaborate on various aspects of the specific parcel – from its required setback, uses, and special features required as part the development.



Developable Parcels

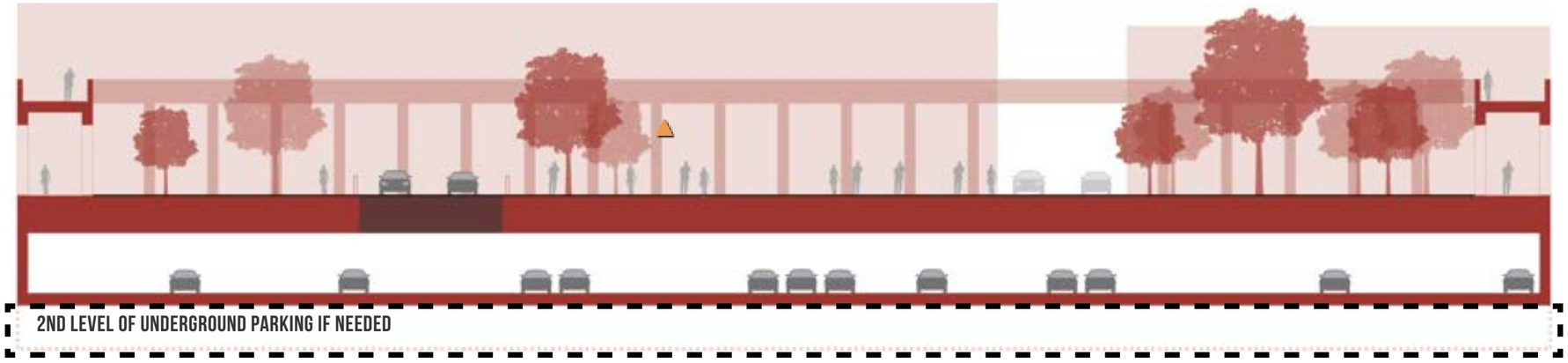


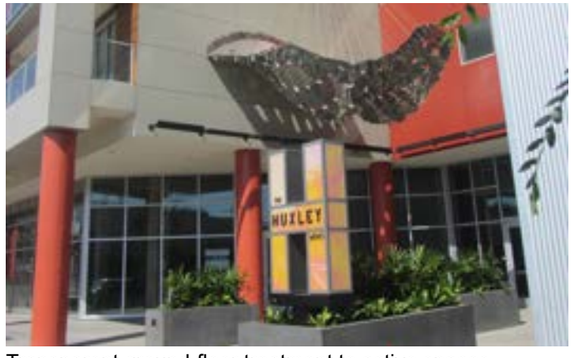
Open Space



Proposed Buildings

**Figure 3-20** Jewel Plaza Cross-Section



Transparent ground-floor treatment to active spaces


High-density housing at a neighborhood scale and style


Open space supportive of a mixed-use civic environment

## 3.3. PARCEL 1 - NEW CITY HALL

The following development standards apply to **Parcel 1** which is envisioned to be the **New City Hall,** as depicted and described in **Figures 3-21** through **3-24.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-21** Envisioned Site Plan and 3D Rendering

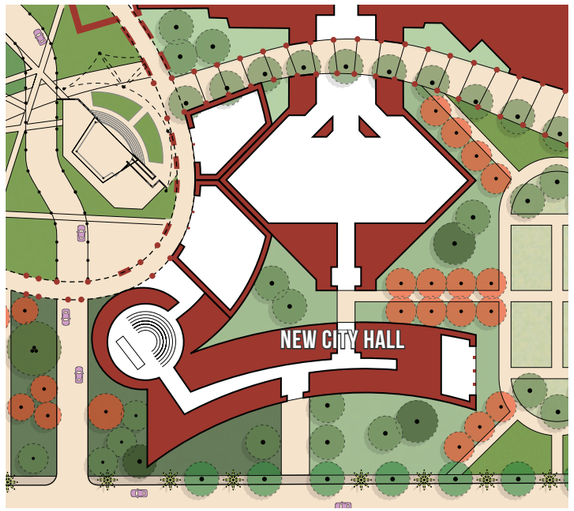
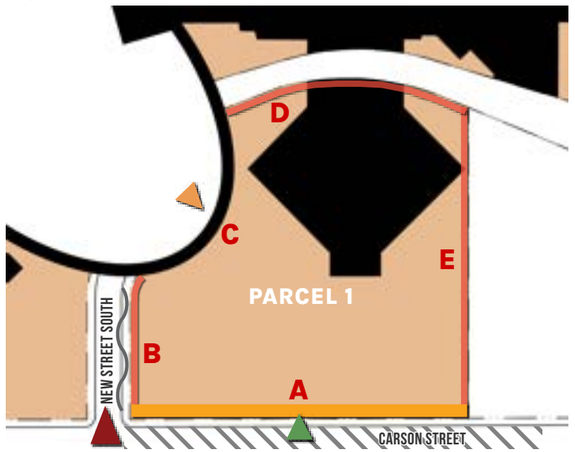





**Figure 3-22** Setbacks, Access, and Open Space




### A. SETBACKS (Setbacks - 10' 5' )

1. Parcel Line **A**: Minimum Setback - 10'; Maximum Setback - NA
2. Parcel Line **B**: Minimum Setback - 5'; Maximum Setback - NA
3. Parcel Line **C**: Minimum Setback - NA; Maximum Setback - 0'
4. Parcel Line **D**: Minimum Setback - NA; Maximum Setback - 5'
5. Parcel Line **E**: Minimum Setback - 5'; Maximum Setback - NA

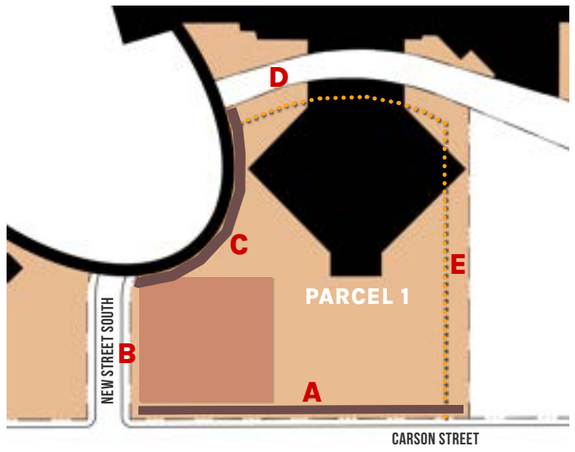
### B. ACCESS

1. Primary Access
   a. Pedestrian - Along front face of the building off of Carson Street.
   b. Vehicular - Along Carson Street
2. Secondary Access
   a. Pedestrian - From the Jewel Plaza, along parcel line **C**.
   b. Vehicular - NA
3. Loading
   a. Passenger - From Carson Street along parcel line **A**
   b. Service - Along parcel line B

### C. OPEN SPACE

1. There shall be a minimum of one (1) publicly accessible open space along Carson Street to mark the entry into the new City Hall.
2. Minimum dimensions for a publicly accessible open space along Carson Street shall be 25'x50' or equal area.
3. Allowed publicly accessible open space types include plazas and courtyards (see section 3.1 for open space types).

**Figure 3-23** Building Height, Profile, and Frontage




### D. BUILDING HEIGHT

1. Heights
   a. Minimum - NA.
   b. Maximum - up to 200' or 15 stories
2. Maximum height shall be concentrated near the intersection of **A** and **B**.

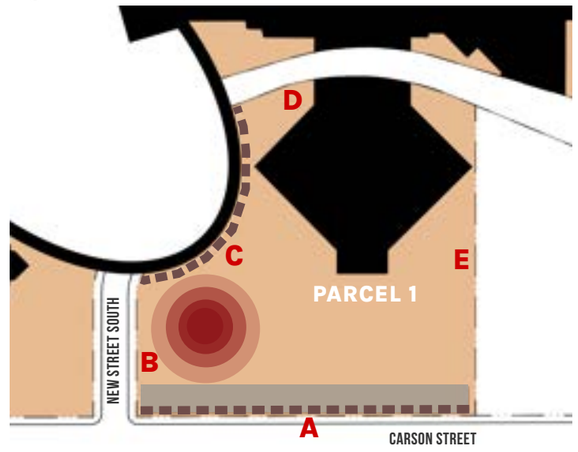
### B. BUILDING PROFILE

1. Primary Step-back
   a. Minimum 20' from parcel line **E**
   b. Maximum 6 stories at step-back
2. Secondary Step-back
   a. Minimum 20' from parcel line **D**
   b. Maximum 4 stories at step-back

### C. FRONTAGE

1. Parcel Line **A**: Shopfronts and arcades allowed
2. Parcel Line **B**: NA
3. Parcel Line **C**: Shopfronts and arcades allowed
4. Parcel Line **D**: NA
5. Parcel Line **E**: NA

**Figure 3-24** Uses, Parking and Special Conditions




### F. USES

1. Civic
2. Retail/Restaurant
3. Office
4. Amenities to support active ground floor uses shall include at least two of the following: seating, art, vendors, activities (e.g. chess tables), and kiosks

### H. PARKING

1. Surface Parking - Limited/Allowed for Handicapped & Seniors
2. Podium Parking - Not Allowed
3. Underground Parking - Allowed
4. Parking, in any condition, is not allowed to be a front face along Carson Street within 20' of parcel line **A**.

### I. SPECIAL CONDITIONS

1. Design of an Iconic Civic Tower and Council Chambers
2. Frontage along The Jewel Plaza
3. Frontage along Carson Street

## 3.4. PARCEL 2 - PERFORMING ARTS CENTER

The following development standards apply to **Parcel 2** which is envisioned to be the **New Performing Arts Center, ,** as depicted and described in **Figures 3-25** through **3-28.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-25** Envisioned Site Plan and 3D Rendering

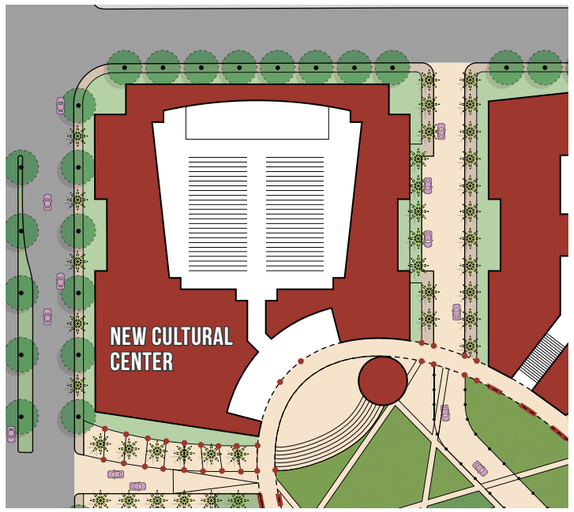





**Figure 3-26** Setbacks, Access, and Open Space

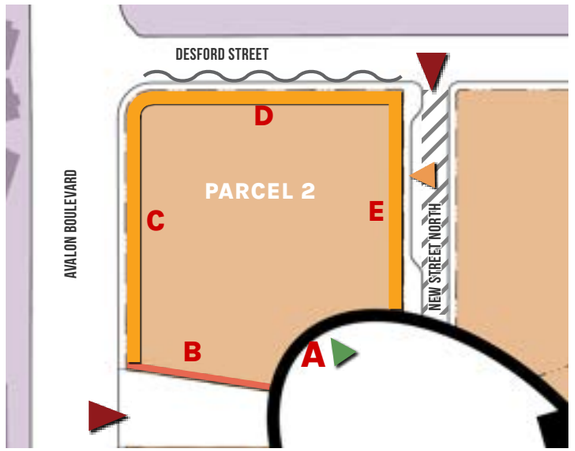



**Figure 3-27** Building Height, Profile, and Frontage

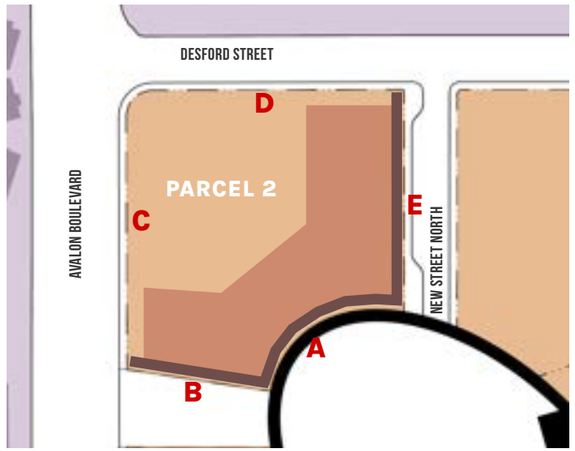
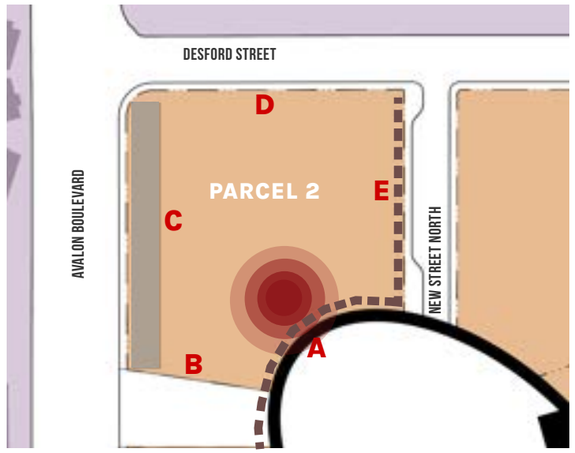



**Figure 3-28** Uses, Parking and Special Conditions




### A. SETBACKS (Setbacks - 10' 5')

1. Parcel Line **A**: Minimum Setback - NA; Maximum Setback - 0'
2. Parcel Line **B**: Minimum Setback - NA; Maximum Setback - 5'
3. Parcel Line **C**: Minimum Setback - 5'; Maximum Setback - 10'
4. Parcel Line **D**: Minimum Setback - 5'; Maximum Setback - 10'
5. Parcel Line **E**: Minimum Setback - 5'; Maximum Setback - 10'

### B. ACCESS

1. Primary Access
   a. Pedestrian - Along front face of the building of **A**
   b. Vehicular - Along Avalon Boulevard
2. Secondary Access
   a. Pedestrian - From New Street along parcel line **E**
   b. Vehicular - From New Street along parcel line **E**
3. Loading
   a. Passenger - From New Street along parcel line **E**
   b. Service - Along parcel line **D**

### C. OPEN SPACE

1. Publicly accessible open space - NA
2. Minimum dimensions for a publicly accessible open space - NA
3. Allowed open space types include plazas, courtyards, greens, and roofdeck gardens (see section XX for open space types).

### D. BUILDING HEIGHT

1. Heights
   a. Minimum - NA
   b. Maximum - up to 120' or 10 stories
2. Maximum height shall be concentrated along A, B, and E. The exception will be the location of a fly tower which is flexible to be placed along any side for maximum height.

### E. BUILDING PROFILE

1. Primary Step-back
   a. Minimum - NA
   b. Maximum - NA
2. Secondary Step-back
   a. Minimum - NA
   b. Maximum - NA

### F. FRONTAGE

1. Parcel Line **A**: Shopfronts and arcades allowed
2. Parcel Line **B**: Shopfronts and arcades allowed
3. Parcel Line **C**: NA
4. Parcel Line **D**: NA
5. Parcel Line **E**: Entry Lobby

### G. USES

1. Civic
2. Retail/Restaurant
3. Assembly

### H. PARKING

1. Surface Parking - Limited/Allowed for Handicapped & Seniors
2. Podium Parking - Not Allowed
3. Underground Parking - Allowed
4. Parking, in any condition, is not allowed to be a front face along Avalon Boulevard within 20' of parcel line **C**.

### I. SPECIAL CONDITIONS

1. Frontage along The Jewel Plaza
2. Frontage along New Street North
3. Entry Lobby from the Jewel Plaza and along the new North Street

## 3.5. PARCEL 3 - NEW MIXED-USE HOUSING

The following development standards apply to **Parcel 3** which is envisioned to be the **New Mixed-Use Housing, ,** as depicted and described in **Figures 3-29** through **3-32.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-29** Envisioned Site Plan and 3D Rendering

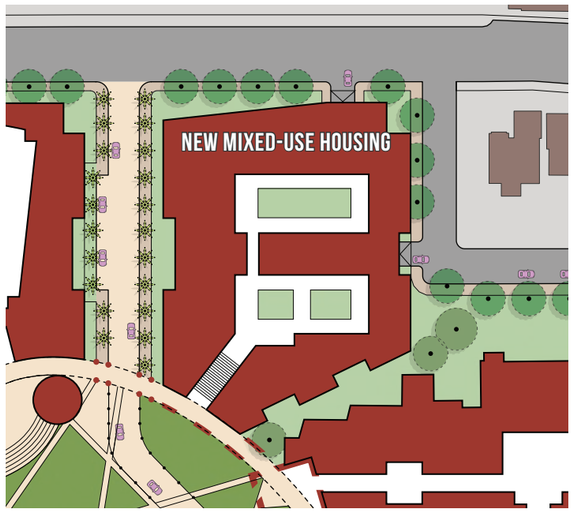





**Figure 3-30** Setbacks, Access, and Open Space

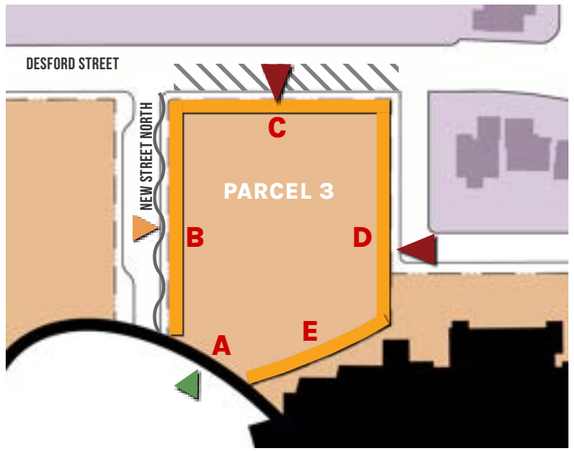



**Figure 3-31** Building Height, Profile, and Frontage

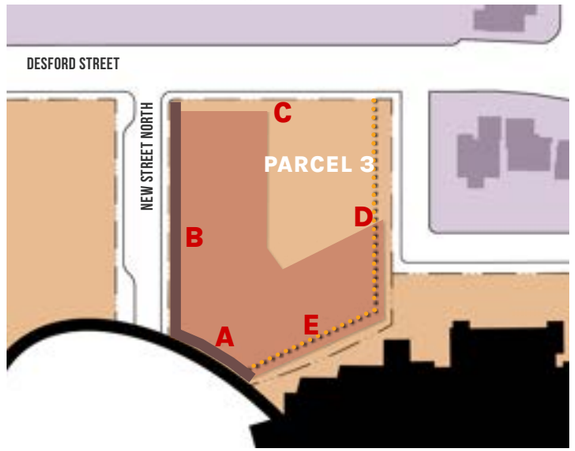
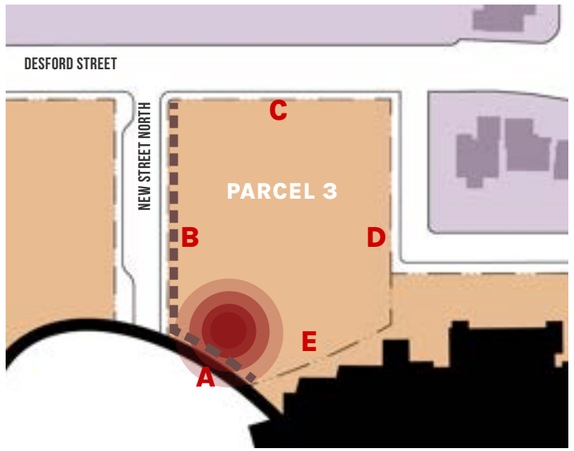



**Figure 3-32** Uses, Parking and Special Conditions




### A. SETBACKS (Setbacks - 10' 5' )

1. Parcel Line **A**: Minimum Setback - NA; Maximum Setback - 0'
2. Parcel Line **B**: Minimum Setback - 5'; Maximum Setback - 10'
3. Parcel Line **C**: Minimum Setback - 5'; Maximum Setback - 10'
4. Parcel Line **D**: Minimum Setback - 10'; Maximum Setback - 10'
5. Parcel Line **E**: Minimum Setback - 5'; Maximum Setback - 10'

### B. ACCESS

1. Primary Access
   a. Pedestrian - Along front face of the building off of parcel line A & B
   b. Vehicular - Along Desford Street
2. Secondary Access
   a. Pedestrian - From New Street along **B**
   b. Vehicular - From existing driveway along **D**
3. Loading
   a. Passenger - From New Street along parcel line **B**
   b. Service - From Desford Street along parcel line **C**

### C. OPEN SPACE

1. Publicly accessible open space - NA
2. Minimum dimensions for a publicly accessible open space - NA
3. Allowed open space types include plazas, courtyards, greens, and roofdeck gardens (see section XX for open space types).

### D. BUILDING HEIGHT

1. Heights
   a. Minimum - NA
   b. Maximum - up to 85' or 8 stories; 4 stories along parcel lines C and D
2. Maximum height shall be concentrated along A, B, and E.

### E. BUILDING PROFILE

1. Primary Step-back
   a. Minimum 20' from parcel line **E** above 4 stories
   b. Max Stories at Step-back: NA
2. Secondary Step-back
   a. Minimum 20' from parcel line **D** above 4 stories
   b. Max Stories at Step-back: NA

### F. FRONTAGE

1. Parcel Line **A**: Shopfronts and arcades allowed
2. Parcel Line **B**: Shopfronts and arcades allowed
3. Parcel Line **C**: NA
4. Parcel Line **D**: NA
5. Parcel Line **E**: NA

### G. USES

1. Residential
2. Retail/Restaurant
3. Active Ground Floor Uses and Amenities
4. Parking

### H. PARKING

1. Surface Parking - Limited/Allowed for Handicapped & Seniors
2. Podium Parking - Allowed
3. Underground Parking - Allowed

### I. SPECIAL CONDITIONS

1. Frontage along The Jewel Plaza
2. Retail Frontage along New Street North
3. Entry Lobby from the Jewel Plaza

## 3.6. PARCEL 4 - NEW HOTEL

The following development standards apply to **Parcel 4** which is envisioned to be the **New Hotel, ,** as depicted and described in **Figures 3-33** through **3-36.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-33** Envisioned Site Plan and 3D Rendering

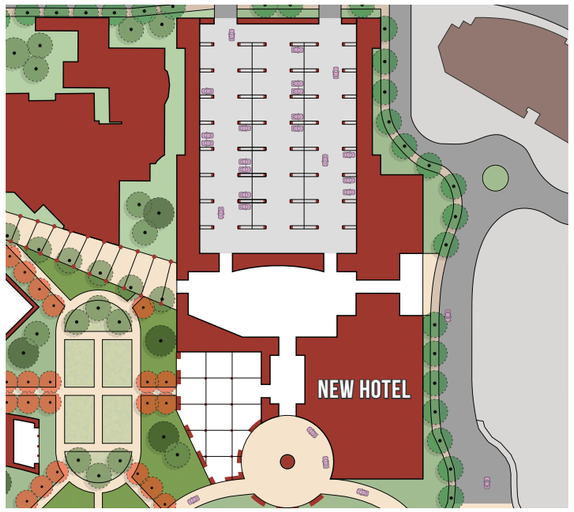
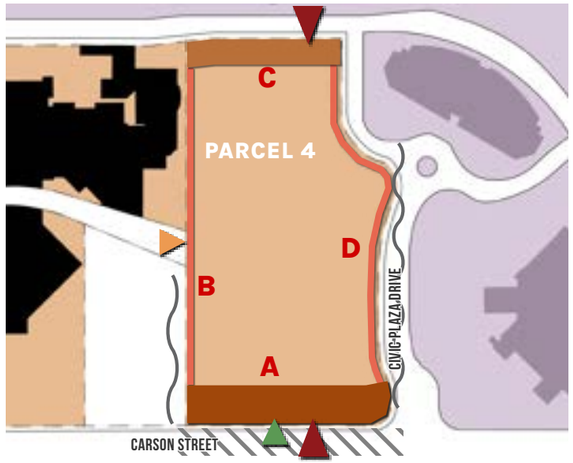





**Figure 3-34** Setbacks, Access, and Open Space




### A. SETBACKS (Setbacks - 30' 20' 5')

1. Parcel Line **A**: Minimum Setback - NA; Maximum Setback - 30'
2. Parcel Line **B**: Minimum Setback - NA; Maximum Setback - NA
3. Parcel Line **C**: Minimum Setback - 20'; Maximum Setback - NA
4. Parcel Line **D**: Minimum Setback - 5'; Maximum Setback - NA

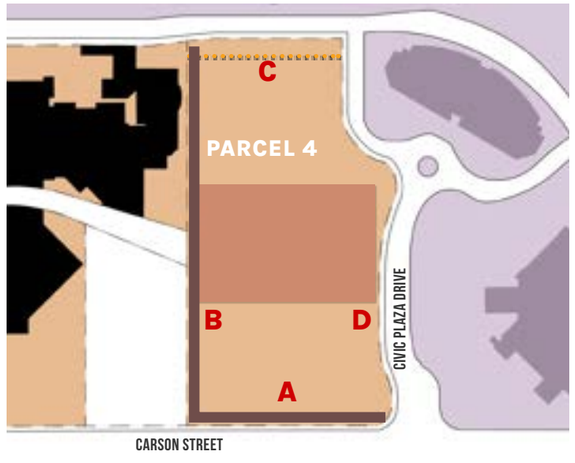
### B. ACCESS

1. Primary Access
   a. Pedestrian - Along front face of the building off of Carson Street.
   b. Vehicular - Along Carson Street
2. Secondary Access
   a. Pedestrian - From the Pedestrian Walkway along parcel line **B**
   b. Vehicular - Along parcel line **C**
3. Loading
   a. Passenger - From Carson Street along parcel line **A**
   b. Service - From Carson Street along parcel line **D**

### C. OPEN SPACE

1. Publicly accessible open space - NA
2. Minimum dimensions for a publicly accessible open space - NA
3. Allowed open space types include plazas, courtyards, greens, and roofdeck gardens (see section XX for open space types).

**Figure 3-35** Building Height, Profile, and Frontage




### D. BUILDING HEIGHT

1. Heights
   a. Minimum - NA
   b. Maximum - up to 240' or 22 stories; 4 stories for 100' from parcel line C
2. Maximum height shall be concentrated adjacent to the Pedestrian Walkway oriented in the east-west direction, within a zone that is the middle third between **A** and **C**..

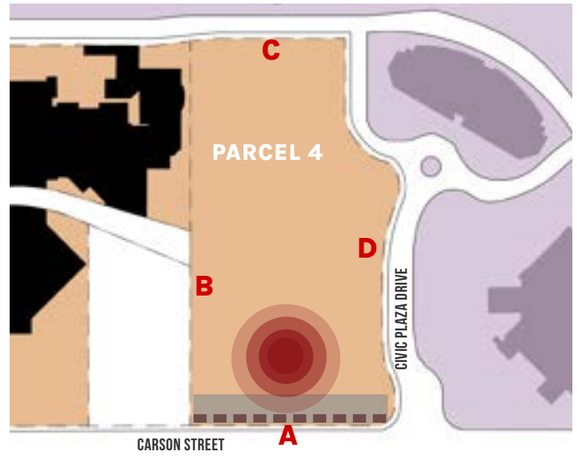
### E. BUILDING PROFILE

1. Primary Step-back
   a. Minimum 20' from parcel line **C** above 4 stories
   b. Maximum - NA
2. Secondary Step-back
   a. Minimum - NA
   b. Maximum - NA

### F. FRONTAGE

1. Parcel Line **A**: Shopfronts and arcades allowed
2. Parcel Line **B**: Shopfronts and arcades allowed
3. Parcel Line **C**: NA
4. Parcel Line **D**: NA
5. Parcel Line **E**: NA

**Figure 3-36** Uses, Parking and Special Conditions




### G. USES

1. Retail/Restaurant
2. Hospitality
3. Entertainment

### H. PARKING

1. Surface Parking - Limited/Allowed for Handicapped, Seniors, and Pick-up/Drop-off
2. Podium Parking - Allowed
3. Underground Parking - Allowed
4. Parking, in any condition, is not allowed to be a front face along Carson Street within 20' of parcel line **A**

### I. SPECIAL CONDITIONS

1. Frontage along Carson Street
2. Entry Lobby and Drop-off along Carson Street

## 3.7. PARCEL 5 - EXISTING EVENT CENTER RENOVATION

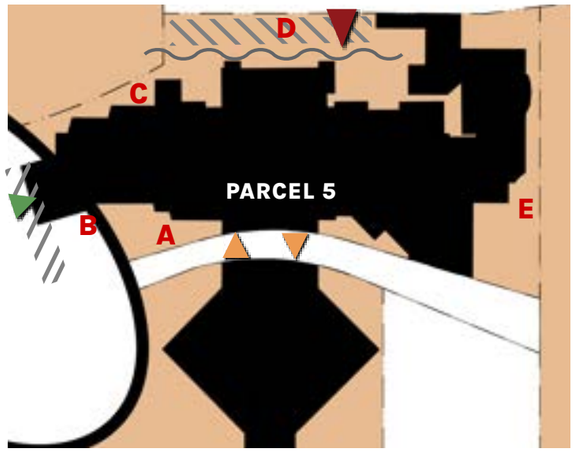
The following development standards apply to **Parcel 5** which is envisioned to be the **Renovated Existing Event Center,** as depicted and described in **Figures 3-37** through **3-40.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-37** Envisioned Site Plan and 3D Rendering






**Figure 3-38** Setbacks, Access, and Open Space




### A. SETBACKS

1. Parcel Line **A**: Minimum Setback - NA; Maximum Setback - NA
2. Parcel Line **B**: Minimum Setback - NA; Maximum Setback - NA
3. Parcel Line **C**: Minimum Setback - NA; Maximum Setback - NA
4. Parcel Line **D**: Minimum Setback - NA; Maximum Setback - NA
5. Parcel Line **E**: Minimum Setback - NA; Maximum Setback - NA

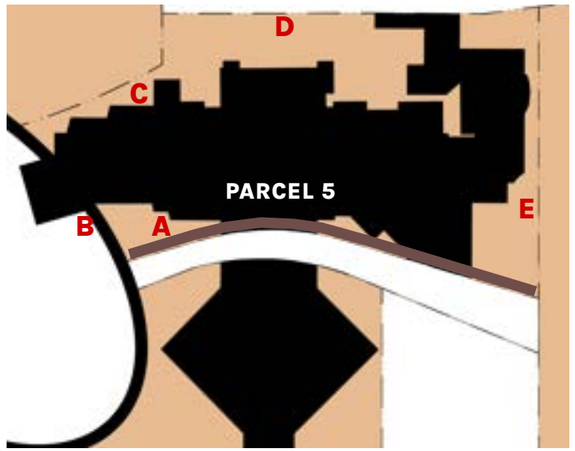
### B. ACCESS

1. Primary Access
   a. Pedestrian - From Jewel Plaza, along parcel line B
   b. Vehicular - Per existing driveway along parcel line D
2. Secondary Access
   a. Pedestrian - From the pedestrian Walkway, along parcel line A
   b. Vehicular - NA
3. Loading
   a. Passenger - Along parcel line **B & D**
   b. Service - Along parcel line **D**

### C. OPEN SPACE

1. Minimum number of Open Spaces - NA
2. Minimum dimensions - NA
3. Allowed publicly accessible open space types - NA

**Figure 3-39** Building Height, Profile, and Frontage




### D. BUILDING HEIGHT

1. Heights
   a. Minimum - NA
   b. Maximum - NA

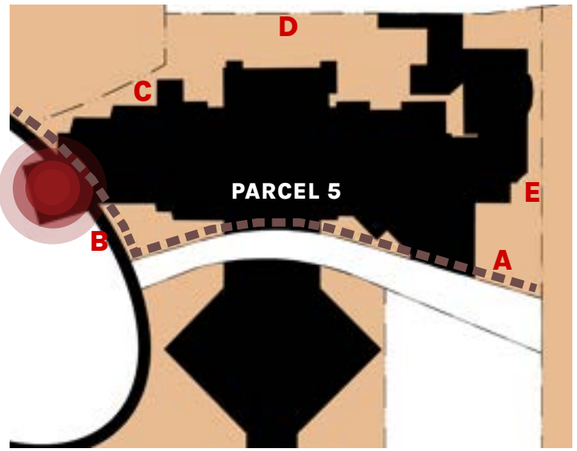
### E. BUILDING PROFILE

1. Primary Step-back
   a. Minimum - NA
   b. Maximum - NA
2. Secondary Step-back
   a. Minimum - NA
   b. Maximum - NA

### F. FRONTAGE

1. Parcel Line **A**: Arcades
2. Parcel Line **B**: NA
3. Parcel Line **C**: NA
4. Parcel Line **D**: NA
5. Parcel Line **E**: NA

**Figure 3-40** Uses, Parking and Special Conditions




### G. USES

1. Civic
2. Retail/Restaurant
3. Office
4. Assembly
5. Education

### H. PARKING

1. Surface Parking - Limited/Allowed for Handicapped & Seniors
2. Podium Parking - Not Allowed
3. Underground Parking - Allowed

### I. SPECIAL CONDITIONS

1. Frontage along The Jewel Plaza
2. Frontage along Pedestrian Walkway
3. Entry Lobby from the Jewel Plaza

## 3.8. PARCEL 6 - EXISTING CITY HALL RENOVATION

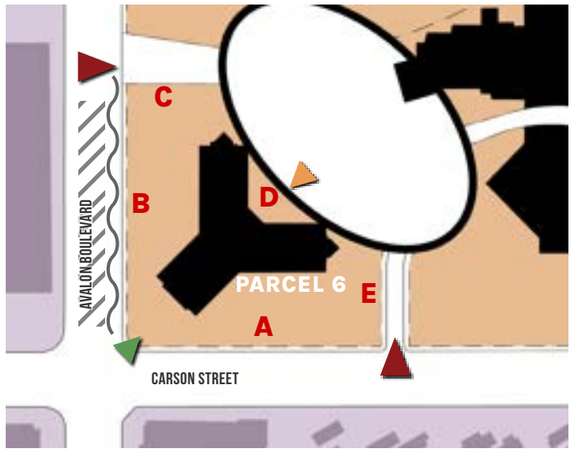
The following development standards apply to **Parcel 6** which is envisioned to be the **Renovated Existing City Hall, ,** as depicted and described in **Figures 3-41** through **3-44.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-41** Envisioned Site Plan and 3D Rendering






**Figure 3-42** Setbacks, Access, and Open Space




### A. SETBACKS

1. Parcel Line **A**: Minimum Setback - NA; Maximum Setback - NA
2. Parcel Line **B**: Minimum Setback - NA; Maximum Setback - NA
3. Parcel Line **C**: Minimum Setback - NA; Maximum Setback - NA
4. Parcel Line **D**: Minimum Setback - NA; Maximum Setback - NA
5. Parcel Line **E**: Minimum Setback - NA; Maximum Setback - NA

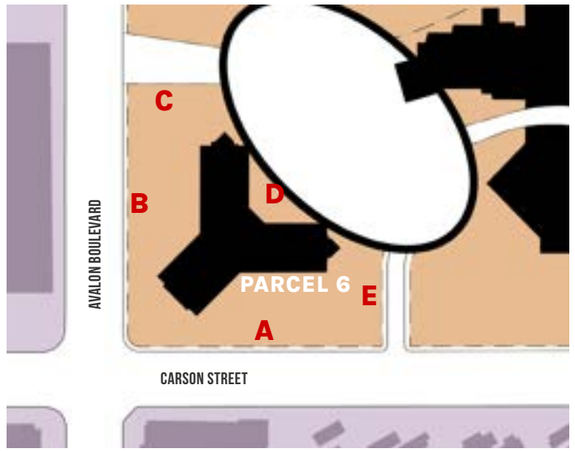
### B. ACCESS

1. Primary Access
   a. Pedestrian - Per existing (facing intersection of Carson Street/Avalon Boulevard and from the Jewel Plaza)
   b. Vehicular - From Carson Street (New Street along E) and from Avalon Boulevard (parking ramp along C)
2. Secondary Access
   a. Pedestrian - Per existing, from the Jewel Plaza
   b. Vehicular - NA
3. Loading
   a. Passenger - From Avalon Boulevard along parcel line **B**
   b. Service - From Avalon Boulevard along parcel line **B**

### C. OPEN SPACE

1. There shall be a minimum of one (1) publicly accessible open space along Carson Street and one (1) along Avalon Boulevard
2. Minimum dimensions for a publicly accessible open space along Carson Street shall be 30'x30'
3. Allowed publicly accessible open space types include plazas, courtyards, and greens/pocket parks (see section XX for open space types).

**Figure 3-43** Building Height, Profile, and Frontage




### D. BUILDING HEIGHT

1. Heights
   a. Minimum - NA
   b. Maximum - NA

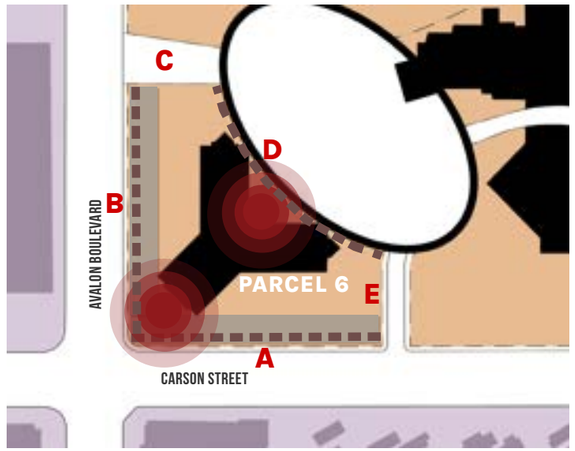
### E. BUILDING PROFILE

1. Primary Step-back
   a. Minimum - NA
   b. Maximum - NA
2. Secondary Step-back
   a. Minimum - NA
   b. Maximum - NA

### F. FRONTAGE

1. Parcel Line **A**: NA
2. Parcel Line **B**: NA
3. Parcel Line **C**: NA
4. Parcel Line **D**: NA
5. Parcel Line **E**: NA

**Figure 3-44** Uses, Parking and Special Conditions




### G. USES

1. Civic
2. Retail/Restaurant
3. Office
4. Amenities to support active ground floor uses shall include at least two of the following: seating, art, vendors, activities (e.g. chess tables), and kiosks

### H. PARKING

1. Surface Parking - Limited/Allowed for Handicapped & Seniors
2. Podium Parking - Not Allowed
3. Underground Parking - Allowed
4. Parking, in any condition, is not allowed to be a front face along Carson Street and Avalon Boulevard within 20' of parcel lines **A** and **B**

### I. SPECIAL CONDITIONS

1. Entry Plaza at Carson Street and Avalon Boulevard Junction
2. Frontage along the Jewel Plaza
3. Entry Lobby along the Jewel Plaza
4. Frontage along Carson Street and Avalon Boulevard

## 3.9. PARCEL 7 - JEWEL PLAZA COLONNADE

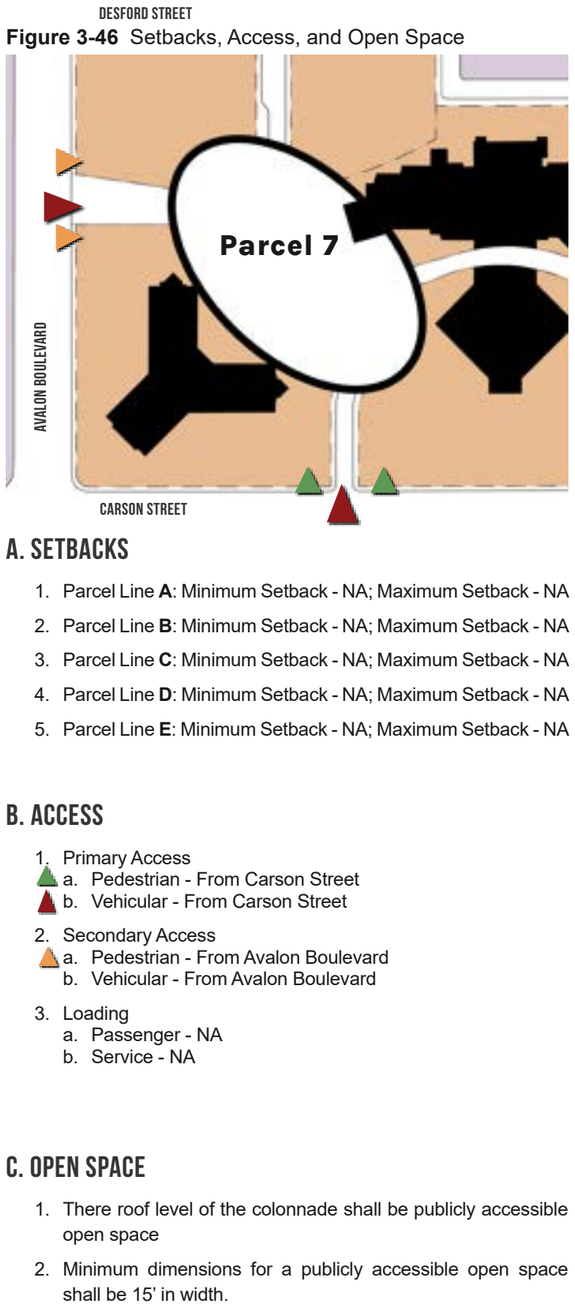
The following development standards apply to **Parcel 7** which is envisioned to be the **New Jewel Plaza Colonnade, ,** as depicted and described in **Figures 3-45** through **3-48.** Each diagram to the right corresponds to development standards directly below them. Additional Design Standards for the Civic Center site can be found in the next chapter.

**Figure 3-45** Envisioned Site Plan and 3D Rendering






**Figure 3-46** Setbacks, Access, and Open Space




### A. SETBACKS

1. Parcel Line **A**: Minimum Setback - NA; Maximum Setback - NA
2. Parcel Line **B**: Minimum Setback - NA; Maximum Setback - NA
3. Parcel Line **C**: Minimum Setback - NA; Maximum Setback - NA
4. Parcel Line **D**: Minimum Setback - NA; Maximum Setback - NA
5. Parcel Line **E**: Minimum Setback - NA; Maximum Setback - NA

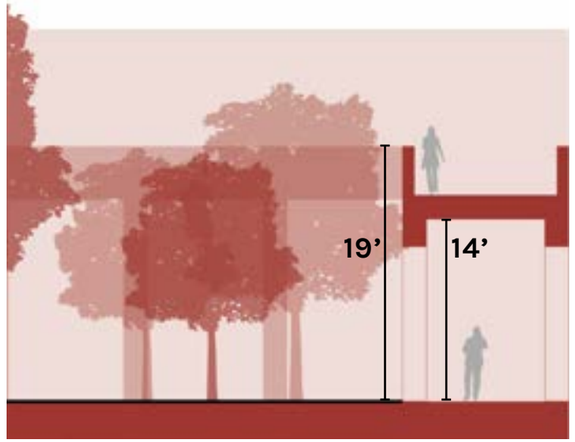
### B. ACCESS

1. Primary Access
   a. Pedestrian - From Carson Street
   b. Vehicular - From Carson Street
2. Secondary Access
   a. Pedestrian - From Avalon Boulevard
   b. Vehicular - From Avalon Boulevard
3. Loading
   a. Passenger - NA
   b. Service - NA

### C. OPEN SPACE

1. There roof level of the colonnade shall be publicly accessible open space
2. Minimum dimensions for a publicly accessible open space shall be 15’ in width.
3. Allowed publicly accessible open space types: NA

**Figure 3-47** Building Height, Profile, and Frontage




### D. BUILDING HEIGHT AND COLUMN SPACING

1. Heights
   a. Minimum - 14’ floor to ceiling; 19’ to top of parapet
   b. Maximum - NA
2. Column Spacing
   a. Minimum - 25’ center line to center line spacing. Exceptions include locations for marking entry points to buildings, open spaces, or at other critical geometric points such as vertices and co-vertices of the oval (Jewel Plaza).
   b. Maximum - NA

### E. BUILDING PROFILE

1. Primary Step-back
   a. Minimum - NA
   b. Maximum - NA
2. Secondary Step-back
   a. Minimum - NA
   b. Maximum - NA

### F. FRONTAGE

1. Parcel Line **A**: NA
2. Parcel Line **B**: NA
3. Parcel Line **C**: NA
4. Parcel Line **D**: NA
5. Parcel Line **E**: NA

**Figure 3-48** Uses, Parking and Special Conditions




### G. USES

1. Civic
2. Open Space
3. Amenities to support active ground floor and rooftop uses shall include at least two of the following: seating, art, activities (e.g. chess tables), and kiosks

### H. PARKING

1. Surface Parking - NA
2. Podium Parking - NA
3. Underground Parking - NA

### I. SPECIAL CONDITIONS

1. Entry points/gateways to the colonnade at the vertices of the major geometric axis
2. Entry points/gateways to the colonnade at the co-vertices of the minor geometric axis
3. Frontage along the Jewel Plaza

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# 4: DESIGN STANDARDS

The City's General Plan provides policy guidance for the entire City's development, and the built environment is directly guided by the zoning code and other municipal standards. The Design Standards become a critical tool to address the unique needs and conditions of the Civic Center.

The Design Standards should be used by designers as a framework for decisions made during the design process. Reviewers (i.e., city staff) will use the design principles to provide consistent and fair review of proposed projects. The City recognizes that each project must be considered individually and is committed to a collaborative review process that has the shared objective of ensuring an enduring and sustainable Civic Center and promoting quality design. Flexibility in considering alternative approaches to good design allows the City to encourage design creativity, and avoid possible undue hardships.

## 4.1. LANDSCAPE PLAN

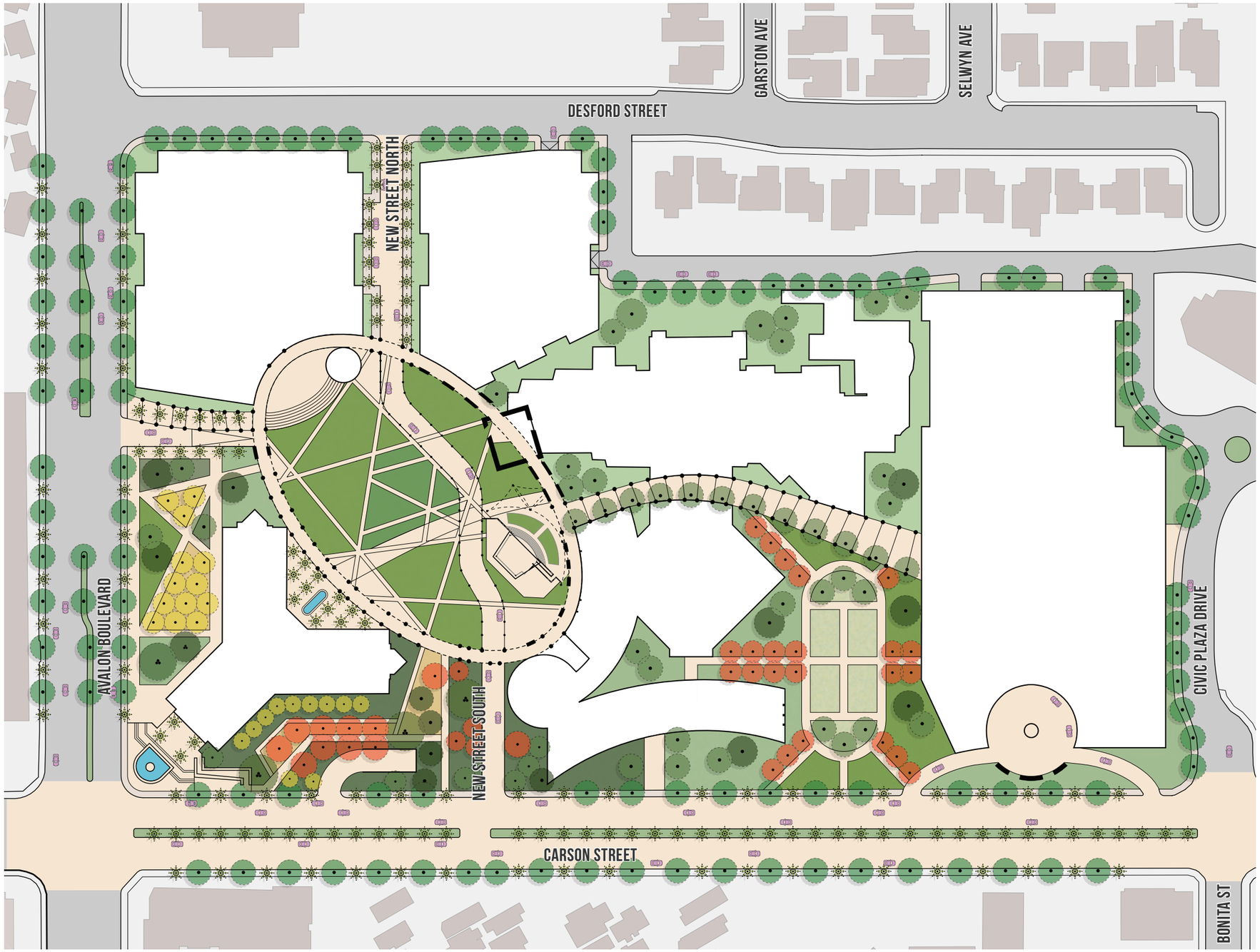
The adjoining pages outline the key landscape elements and details that will occupy the public open spaces within this project. The Landscape Plan (**Figure 4-1**) shows, in general, the location of trees, the diversity of tree species, key planting versus hardscape areas, and the form of the paving throughout the project. Like the Vision Plan, this drawings is also hypothetical in nature in that it seeks to convey intentions and not the exact design details. Paving patterns and planting configurations can change as the project proceeds. The information on these pages seeks to only regulate the key aspects of this project that should not be compromised.

Providing a safe, reliable, and accessible public realm network is a fundamental component of a successful mixed-use civic center environment. The public realm is the armature around which private development will occur over time.

This section provides the regulations for the design of landscape elements in the public realm. They include landscape components in the public right-of-way, including roadways, parkways (landscaping strips), street trees, sidewalks as well as open spaces such as plazas and greens.

Our landscape design standards will conform to the California State Model Water Efficient Landscape Ordinance (MWELO), which promotes water-efficient irrigation, climate-appropriate planting, proper soil management, and landscape practices that minimize waste and support long-term sustainability.

**Figure 4-1** Landscape Plan



## 4.2. PLANTING MATRIX
## TREES

| Botanical Name | Common Name | Water Use | CA Native | Size (HT) | Designation | Imperial Avalon Specific Plan | Carson Street Master Plan |
|---|---|---|---|---|---|---|---|
| *Arbutus unedo* 'Marina' | Strawberry Tree | Low | | 40'-50' | Campus | YES | YES |
| *Calocedrus decurrens* | Incense Cedar | Moderate | X | 12'-200' | Campus | | |
| *Cercis canadensis* | Eastern Redbud | Moderate | | 15'-30' | Sidewalk / Campus | YES | |
| *Cercis occidentalis* | Western Redbud | Low | X | 10'-20' | Sidewalk / Campus | YES | |
| *Chilopsis linearis* | Desert Willow | Very Low | X | 15'-40' | Campus | | |
| *Geijera parviflora* | Australian Willow | Low | | 20'-30' | Sidewalk / Campus | YES | |
| *Ginkgo biloba* | Maidenhair Tree, Ginkgo | Moderate | | 50'-80' | Campus | | |
| *Heteromeles arbutifolia* | Toyon | Low | X | 6'-10' | Campus | | |
| *Koelreuteria bipinnata* | Chinese Flame Tree | Moderate | | 25'-50' | Sidewalk / Campus | | YES |
| *Koelreuteria paniculata* | Golden Rain Tree | Low | | 20'-40' | Sidewalk / Campus | | YES |
| *Lagerstroemia indica* 'Natchez' | Crape Myrtle Natchez | Moderate | | 20'-25' | Sidewalk | YES | |
| *Lophostemon confertus (Tristania conferta)* | Brisbane Box | Moderate | | 40'-60' | Sidewalk / Campus | YES | YES |
| *Lyonothamnus floribundus* | Santa Cruz Island Ironwood | Low | X | 20'-30' | Sidewalk / Campus | | |
| *Melaleuca quinquenervia* | Broad-Leafed Paperbark | Low | | 25'-40' | Campus | | |
| *Olea europaea* 'Swan Hill' | Swan Hill Fruitless Olive | Low | | 20'-30' | Campus | YES | |
| *Parkinsonia x* 'Desert Museum' | Desert Museum Palo Verde | Very Low | X | 25' | Campus | | YES |
| *Phoenix dactylifera 'Medjool'* | Date Palm | Low | | 50'-100' | Median / Campus | YES | YES |
| *Pinus canariensis* | Canary Island Pine | Low | | 80'-90' | Campus | | YES |
| *Pistacia chinensis* | Chinese Pistache | Low | | 30'-35' | Campus | | |
| *Platanus racemosa* | California Sycamore | Moderate | X | 20'-115' | Campus | YES | |
| *Platanus x acerifolia* 'Columbia' | Columbia London Plane Tree | Moderate | | 40'-80' | Sidewalk / Median | | YES |
| *Quercus agrifolia* | Coast Live Oak | Very Low | X | 25'-82' | Campus | YES | |
| *Quercus polymorpha* | Mexican White Oak | Moderate | | 40'-60' | Campus | | |
| *Quercus tomentella* | Island Oak | Low | X | 33'-66' | Sidewalk / Campus | | |
| *Quercus virginiana* | Live Oak | Low | | 40'-70' | Campus | | |
| *Searsia lancea* | African Sumac | Low | | 20'-30' | Campus | | |
| *Tabebuia impetiginosa* | Pink Trumpet Tree | Moderate | | 20'-30' | Sidewalk / Campus | YES | YES |
| *Tipuana tipu* | Tipu Tree | Moderate | | 20'-30' | Sidewalk / Campus | | |
| *Ulmus parvifolia 'Drake'* | Chinese Elm | Moderate | | 30'-50' | Campus | YES | |
| *Umbellularia californica* | California Laurel, Bay Laurel | Low | X | 6'-80' | Campus | | |
| *Washingtonia robusta* | Mexican Fan Palm | Low | | 40'-100' | Sidewalk / Median | | YES |
| *x Chitalpa tashkentensis* 'Pink Dawn' | Pink Dawn Chitalpa | Low | | 25' | Sidewalk | | YES |



Arbutus ‘Marina’
Marina Strawberry



Washingtonia robusta
Mexican Fan Palm



Heteromeles arbutifolia
Toyon



Koelreuteria bipinnata
Chinese Flame Tree



Parkinsonia x ‘Desert Museum’
Desert Museum Palo Verde



Platanus racemosa
California Sycamore



Quercus polymorpha
Mexican White Oak



Searsia lancea
African Sumac



Tipuana tipu
Tipu Tree

## SHRUBS

| Botanical Name | Common Name | Water Use | CA Native | Size (HT) | Imperial Avalon Specific Plan | Carson Street Master Plan |
|---|---|---|---|---|---|---|
| *Acacia cognata* 'Cousin Itt' | Cousin Itt Acacia | Moderate | | 24"-36" | | |
| *Acacia cultiformis* | Knife Leaf Acacio | Moderate | | 24"-36" | | YES |
| *Adenanthos* 'Silver Haze' | Silver Haze Woollybush | Low | | 4'-6' | YES | |
| *Aeonium spp.* | Aeonium | Low | | | | |
| *Asarum canadense* | Wild Ginger | Moderate | | 1' | YES | |
| *Carissa macrophylla* 'Green Carpet' | Green Carpet Carissa | Low | | 12"-24" | | YES |
| *Ceanothus* species & cultivars | Wild Lilac | Low | X | var. | | |
| *Ceanothus* 'Ray Hartman' | Ray Hartman Ceanothus | Low | X | 15'-30' | | YES |
| *Ceanothus x* 'Concha' | Concha Ceanothus | Low | X | 3'-6' | | |
| *Chondropetalum tectorum* | Small Cape Rush | Low | | 24"-36" | YES | |
| *Daisylirion wheeleri* | Spoon Yucca | Low | | 4'-6' | | |
| *Eucalyptus 'Moon Lagoon'* | Fine Leafed Mallee | Low | | 4'-8' | YES | |
| *Euonymus japonicus 'Microphyllus'* | Boxleaf Euonymus | Moderate | | 1'-2' | | YES |
| *Euphorbia characias subsp. Wulfenii* | Mediterranean Spurge | Low | | 3'-4' | YES | |
| *Euphorbia myrsinites* | Myrtle Spurge | Low | | 4"-6" | YES | |
| *Gardenia jaminoides* 'Aimee' | First Love Gardenia | Low | | 5'-6' | YES | |
| *Grevillea* species & cultivars | Grevillea | Low | | var. | | |
| *Grevillea* 'Bonfire' | Bonfire Grevillea | Low | | 8'-12' | | |
| *Grevillea lanigera* 'Coastal Gem' | Coastal Gem Woolly Grevillea | Low | | 12" | | YES |
| *Hypocalaymma robustum* | Swan River Myrtle | Moderate | | 1'-2' | YES | |
| *Liriope* 'Giantea' | Giant Lily Turf | Moderate | | 2'-3' | YES | |
| *Lavandula dentata* | French Lavender | Low | | 2'-3' | YES | |
| *Lantana camara* & cultivars | Lantana | Low | | var. | | |
| *Lantana* 'Lemon Swirl' | Lemon Swirl Bush Lantana | Low | | 4'-6' | | YES |
| *Lantana Montevidensis* 'White Lantana' | White Lightinin' Trailing Lantana | Low | | 8'-10' | | YES |
| *Lantana* 'New Gold' | New Gold Lantana | Low | | 12"-18" | | YES |
| *Lantana* 'Spreading Yellow' | Spreading Yellow Lantana | Moderate | | 6'-8' | | YES |
| *Myrtus communis* 'Compacta' | Dwarf Myrtle | Low | | 24"-36" | | |
| *Myrtus communis* | Common Myrtle | Low | | 8'-12' | YES | |
| *Olea* 'Little Ollie' | Little Ollie Fruitless Dwarf Olive | Low | | 6' | YES | |
| *Philodendron xanadu* | Philodendron xanadu | Moderate | | 3'-5' | YES | |
| *Portulacaria afra* 'Prostrate Form' | Dwarf Elehpant Food | Low | | Prostrate | YES | |
| *Salvia apiana* | White Sage | Low | | 3'-5' | YES | |
| *Salvia clevelandii* | Cleavland Sage | Low | X | 5'-8' | YES | |
| *Sansevieria* species & cultivars | Sansevieria | Low | | var. | | |
| *Santolina chamaecyparissus* | Gray Lavender Cotton | Low | | 1'-2' | YES | |
| *Teucrium fruticans* | Tree Germander | Low | | 4'-8' | YES | |
| *Westringia* 'Aussie Box' | Westringia Aussie Box | Low | | 36" | | YES |
| *Westringia fruticosa* | Coast Rosemary | Low | | 4'-6' | | |
| *Westringia fruticosa* 'Morning Light' | Morning Light Coast Rosemary | Low | | 3'-4' | | |
| *Westringia fruticosa* 'Mundi' | Mundi Coast Rosemary | Low | | 12"-24" | YES | YES |
| *Yucca species & cultivars* | Yucca | Low | | var. | YES | |



Acacia cognata 'Cousin Itt'
Cousin Itt Acacia



Chondropetalum tectorum
Small Cape Rush



Grevillea 'Bonfire'
Bonfire Grevillea



Lantana montevidensis 'White Lantana'
White Lightnin' Trailing Lantana



Lavandula dentata
French Lavender



Myrtus communis
Common Myrtle



Olea 'Little Ollie'
Little Ollie Fruitless Dwarf Olive



Salvia apiana
White Sage



Teucrium fruticans
Tree Germander

## PERENNIALS, SUCCULENTS, AND GRASSES

| Botanical Name | Common Name | Water Use | CA Native | Size (HT) | Imperial Avalon Specific Plan | Carson Street Master Plan |
|---|---|---|---|---|---|---|
| *Achillea* 'Moonshine' | Fern Leaf Yarrow | Low | | 1'-2' | | |
| *Adiantum jordanii* | California Maiden Hair Ferd | Moderate | | 1'-2' | YES | |
| *Aeonium canariense* | Canary Island Aeonium | Low | | 2'-3' | YES | |
| *Agave* species & cultivars | Agave | Low | | var. | | |
| *Agave attenuata* | Fox Tail Agave | Low | | 4'-5' | | YES |
| *Agave attenuata* 'Boutin Blue' | Blue Fox Tail Agave | Low | | 3'-4' | YES | |
| *Agave attenuata* 'Kara's Stripes' | Variegated Fox Tail Agave | Low | | 2'-4' | | YES |
| *Agave desmettiana* | Smooth Agave | Very Low | | 24"-36" | | YES |
| *Agave x* 'Blue Flame' | Blue Flame Agave | Low | | 24"-36" | | YES |
| *Agave* 'Blue Glow' | Blue Glow Agave | Low | | 1'-2' | YES | |
| *Aloe vera* | Medicinal Aloe | Low | | 12"-24" | YES | YES |
| *Aloe x spinosissima* | Spider Aloe | Low | | 24"-36" | | YES |
| *Aristida purpurea* 'Chino Hills' | Purple Three Awn | Low | | 2'-3' | | |
| *Asclepias fascicularis* | Narrow-leaved Milkweed | Low | | 2'-3' | | |
| *Bouteloua gracilis* 'Blonde Ambition' | Blue Grama | Low | X | 6"-24" | | |
| *Beschoneria yuccoides 'Flamingo Glow'* | Variegated Amole | Low | | 4'-6' | | YES |
| *Carex divulsa* | Foothill Sedge | Low | | 12"-24" | | |
| *Carex praegracilis* | Clustered Field Sedge, California Field Sedge | Moderate | X | 4"-12" | YES | |
| *Cotyledon* species & cultivars | Cotyledon | Low | | <36" | | |
| *Crassula arborescens ssp. Undulatifolia* | Ripple Jade | Low | | 3'-4' | | |
| *Crassula* 'Blue Bird' | Crassula Blue Bird | Low | | 2'-3' | | |
| *Crassula multicava* | Fairy Crassula | Low | | <12" | | YES |
| *Crassula multicava* 'Cape Province' | Cape Province Pygmyweed | Low | | <12" | | |
| *Dianella* species & cultivars | Flax Lily | Low | | var. | | |
| *Dianella caerulea* 'Cassa Blue' | Cassa Blue Flax Lily | Moderate | | 12"-24" | | |
| *Dianella revoluta* 'Little Rev' | Little Rev Flax Lily | Low | | 24"-36" | YES | YES |
| *Dianella tasmanica* 'Tasred' | Tasred Flax Lily | Moderate | | 18"-24" | | YES |
| *Dudleya* species & cultivars | Dudleya | Very Low | X | var. | | |
| *Dudleya lanceolata* | Lanceleaf Liveforever | Very Low | X | 3"-4" | | |
| *Dudleya pulverulenta* | Chalk Dudleya | Very Low | X | 4"-12" | | |
| *Elymus glaucus* | Blue Wild Rye Grass | Low | X | 1'-5' | | |
| *Eriogonum fasciculatum* | California Buckwheat | Very Low | X | 1'-7' | | |
| *Festuca californica* | California Fescue | Very Low | X | 12"-36" | | |
| *Festuca glauca* 'Elijah Blue' | Elijah Blue Fescue | Low | | 8"-1' | YES | |
| *Festuca mairei* | Atlas Fescue | Low | | 24"-36" | | |
| *Furcraea macdougallii* | MacDougall's Centry Plant | Low | | 6'-8' | | YES |
| *Hemerocallis hybrida* | Daylily | Moderate | | 24"-36" | | |
| *Hemerocallis HYB 'Bitsy'* | Bitsy Yellow Daylily | Moderate | | 1' | | YES |
| *Hesperaloe parviflora* | Red Yucca | Very Low | | 36" | | YES |
| *Iris douglasiana* | Coastal Iris, Douglas Iris | Low | X | 7"-31" | | |
| *Juncus effusus* | Common Rush | Moderate | | 3'-4' | YES | |
| *Leymus condensatus* 'Canyon Prince' | Canyon Prince Wild Rye | Low | X | 24"-36" | YES | |
| *Leymus triticoides* | Creeping Wild Rye | Low | X | 2'-4' | | |
| *Lomandra* species & cultivars | Mat Rush | Low | | var. | | |
| *Lomandra Longifolia* | Spiny-Headed Mat Rush | Moderate | | 4'-5' | YES | |
| *Lomandra longifolia* 'Breeze' | Dwarf Mat Rush | Low | | 24"-36" | | YES |
| *Polystichum munitum* | Western Sword Fern | Moderate | | 4'-5' | YES | |
| *Phormium* species & cultivars | phr | Moderate | | | | |
| *Phormium 'Duet'* | Dwarf Variegated Flax | Moderate | | 1'-2' | | YES |
| *Phormium 'Firebird'* | Firebird New Zealand Flax | Moderate | | 3'-4' | | YES |
| *Phormium tenax* 'Jack Spratt' | New Zealand Flax | Low | | 18" | | |
| *Phormium 'Sunset'* | Sunset New Zealand Flax | Moderate | | 4'-5' | | YES |
| *Phormium 'Yellow Wave'* | Yellow Wave Flax | Moderate | | 3'-4' | | YES |
| *Phormium 'Sea Jade'* | Sea Jade Flax | Moderate | | 4'-6' | YES | |
| *Senecio cylindricus* | Narrow-Leaf Chalksticks | Low | | 12"-24" | | |
| *Senecio mandraliscae* | Kleinia Chalksticks | Low | | 12"-36" | | |
| *Senecio serpens* | Blue Chalksticks | Low | | <12" | YES | YES |
| *Sisyrinchium bellum* | Blue-Eyed Grass | Low | X | 12"-24" | | |
| *Zoysia tenuifolia* | Korean Grass | Moderate | | 1"-1.5" | | |
| *Portulacaria afra* & cultivars | Elephant's Food | Very Low | | var. | | |
| *Portulacaria afra* 'Prostrate Form' | Dwarf Elehpant Food | Low | | Prostrate | YES | |



Agave attenuata
Fox Tail Agave



Agave 'Blue Glow'
Blue Glow Agave



Aristida purpurea 'Chino Hills'
Purple Three Awn



Bouteloua gracilis 'Blonde Ambition'
Blue Grama



Crassula 'Blue Bird'
Crassula Blue Bird



Leymus condensatus 'Canyon Prince'
Canyon Prince Wild Rye



Phormium 'Firebird'
Firebird New Zealand Flax



Phormium 'Yellow Wave'
Yellow Wave Flax



Senecio mandraliscae
Blue Chalksticks

## GROUND COVERS

| Botanical Name | Common Name | Water Use | CA Native | Size (HT) | Imperial Avalon Specific Plan | Carson Street Master Plan |
|---|---|---|---|---|---|---|
| *Acacia redolens* 'Low Boy' | Prostrate Acacia | Very Low | | 12"-24" | | YES |
| *Achillea millefolium* | Common Yarrow | Low | X | 12"-36" | | |
| *Achillea* 'Moonshine' | Moonshine Yarrow | Moderate | | 12"-24" | | |
| *Arctostaphylos* (Prostrate Varieties) | Manzanita | Low | X | <36" | | |
| *Arcostaphylos* 'Pacific Mist' | Pacific Mist Manzanita | Low | X | 12"-24" | | |
| *Baccharis pilularis ssp. pilularis* 'Pigeon Point' | Pigeon Point Coyote Brush | Low | X | 12"-24" | | |
| *Baccharis pilularis* 'Twin Peaks No. 2' | Dwarf Coyote Brush | Low | X | 12"-18" | | |
| *Bougainvillea* 'La Jolla' | La Jolla Bougainvillea | Low | | 4'-5' | | YES |
| *Bougainvillea* 'Oo-la-la' | Oo-La-La Bougainvillea | Low | | 24" | | YES |
| *Bougainvillea 'Rosenka'* | Rosenka Bougainvillea | Low | | 24"-48" | | |
| *Carissa macrocarpa* 'Green Carpet' | Green Carpet | Low | | 12"-24" | | YES |
| *Chondropetalum tectorum* | Small Cape Rush | Low | | 24"-36" | | |
| *Dymondia margaretae* | Silver Carpet | Low | | <12" | | |
| *Eriogonum fasciculatum* 'Warriner Lytle' | California Buckwheat | Very Low | X | 24"-36" | | |
| *Festuca cinerea/Festuca ovina glauca* | Blue Fescue | Low | | 8"-12" | | |
| *Festuca rubra* | Red Fescue | High | X | 12"-36" | | |
| *Lantana montevidensis* & cultivars | Trailing Lantana | Low | | 12"-24" | | YES |
| *Lantana Montevidensis 'White Lantana'* | White Lightinin' Trailing Lantana | Low | | 8'-10' | | YES |
| *Myoporum* 'Pacificum' & 'Putah Creek' | Pacific Myoporum | Low | | 24" | | YES |
| *Philodendron* 'Xanadu' | Xanadu Philodendron | Moderate | | 36" | YES | |
| *Rosa White Meidlland* | Groundcover Rose | Moderate | | 12"-24" | | |
| *Rosa x 'NOA97400A'* | Flower Carpet Amber Rose | Moderate | | 3'-4' | | YES |
| *Salvia leucophylla* | Purple Sage | Very Low | X | 2'-5' | | |
| *Salvia leucophylla* 'Point Sal Spreader' | Point Sal Spreader Purple Sage | Very Low | X | 2'-3' | | |
| *Salvia rosmarinus* *(Rosmarinus officinalus;* Prostrate varieties) | Prostrate Rosemary, Trailing Rosemary | Low | | Spreading | YES | |
| *Salvia x* 'Bee's Bliss' | Bee's Bliss Sage | Low | X | 24" | | |
| *Trachelospermum jasminoides* | Star Jasmine | Moderate | | Spreading | YES | |



Achillea ‘Moonshine’
Moonshine Yarrow



Arctostaphylos ‘Pacific Mist’
Pacific Mist Manzanita



Baccharis pilularis ‘Twin Peaks No. 2’
Dwarf Coyote Brush



Carissa macrocarpa ‘Green Carpet’
Green Carpet Natal Plum



Dymondia margaretae
Silver Carpet



Festuca ovina glauca
Blue Fescue



Lomandra longifolia ‘Breeze’
Dwarf Mat Rush



Myoporum ‘Pacificum’ & ‘Putah Creek’
Creeping Myoporum



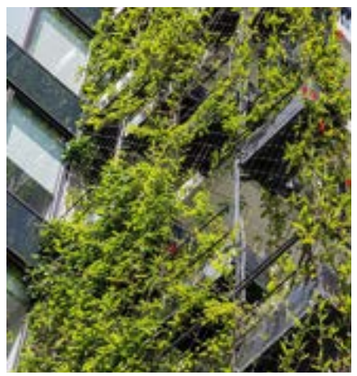
Salvia leucophylla
Purple Sage

## VINES

| Botanical Name | Common Name | Water Use | CA Native | Size (Spreading) | Designation | Functional Value | Imperial Avalon Specific Plan | Carson Street |
|---|---|---|---|---|---|---|---|---|
| *Bougainvillea* species & cultivars | Bougainvillea | Low | | 5'-30' | Private | Accent; Flowering | | |
| *Bougainvillea* 'La Jolla' | La Jolla Bougainvillea | Low | | 4'-5' | Private | Accent; Flowering | | |
| *Cestrum nocturnum* | Night Blooming Jasmine | Moderate | | 8'-10' | Private | | YES | |
| *Ficus pumila* | Creeping Fig | Low | | 20' | Private | | YES | YES |
| *Grewia occidentalis* | Lavender Starflower | Moderate | | 12' | Private | Accent; Flowering | YES | |
| *Macfadyena unguis-cati* | Cat's-Claw Creeper | Low | | 25'-40' | Private | Flowering | | |
| *Petrea volubilis* | Queen's Wreath | Moderate | | Spreading | Private | | YES | |
| *Pandorea jasminoides* 'Rosa' | Pink Bower Vine | Moderate | | 20-30' | Private | Flowering | | |
| *Parthenocissus tricuspidata* | Boston Ivy | Moderate | | 30'-60' | Private | Accent | | YES |
| *Parthenocissus quinquefolia* | Virginia Creeper | Moderate | | 8'-10' | | | YES | |
| *Trachelospermum jasminoides* | Star Jasmine | Moderate | | 18-20' | Private | Flowering; Screening | YES | |
| *Vitis californica* 'Roger's Red' | Roger's Red California Grape | Low | X | 20-40' | Private | Accent; Pollinator Habitat | YES | |
| *Wisteria floribunda* | Japanese Wisteria | Moderate | | 10'-20' | | Accent | YES | |
| *Rosa* 'Climbing Ibeburg' | Climbing Iceburg Rose | Moderate | | 18-20' | Private | Flowering; Screening | YES | YES |

### VERTICAL GREEN WALL SYSTEMS

Beyond the planting palette shown on these pages, the CCC Specific Plan also envisions vertical green walls in various places. Vertical green wall systems insulate buildings, reduce noise, and are an attractive option for privacy screening.



Climbing vines supported by wire cables or trellis structure



Modular soil cells attached to wall



Bougainvillea ssp.



Dolichandra unguis-cati
Cat's Claw Creeper



Parthenocissus tricuspidata
Boston Ivy



Petrea volubilis
Queen's Wreath



Trachelospermum jasminoides
Star Jasmine



Vitis californica 'Roger's Red'
Roger's Red California Grape



Wisteria floribunda
Japanese Wisteria



Pandorea jasminoides 'Rosea'
Pink Bower Vine



Parthenocissus quinquefolia
Virginia Creeper

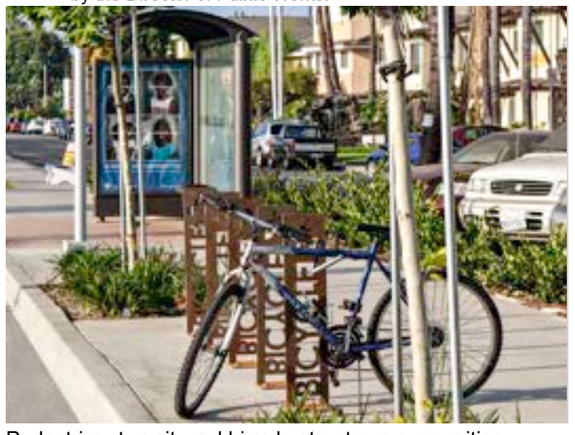
## 4.3. LANDSCAPE STANDARDS

This Chapter provides guidance to both City staff and private developers for the design of streetscape elements in the public realm; these include physical components in the public right-of-way, including roadways, parkways (landscaping strips), street trees, sidewalks, and open space. These public realm guidelines also apply to areas in private setbacks that are publicly accessible, such as plazas, seating areas, and extended sidewalks.

Providing safe, reliable, and accessible public realm networks to and from destinations, including transit, is a fundamental component of a successful civic and commercial environment. As development opportunities are introduced, certain amenities should be added to ensure pedestrians, cyclists, visitors, and commuters are able to safely and comfortably move around the city.

### STREET AMENITIES

1. **General**. Street furniture such as benches, trash receptacles, kiosks, bicycle racks, and transit shelters shall be consistent throughout the Specific Plan area with product and design standards developed by the Director of Community Development. Multifunctional elements (e.g., seating integrated with planters) located in common open space or along shared pedestrian pathways shall be included where feasible.
2. **Required Seating**
   a) Seating to accommodate 2 persons for every 250 square feet of common open space.
   b) At least 50% of the seating areas shaded by a permanent shade structure or tree.
3. **Walking Zones**. Street furniture shall be placed outside of the walking zone to avoid creating a hazard for pedestrians. In constrained sidewalk conditions, where the sidewalk is less than 10 feet from curb to property line, street furniture shall be placed on curb extensions or integrated into private development within a required area dedicated to the public realm. Except at bus shelters and when space allows, benches shall face or be perpendicular to the sidewalk creating a seating area.
4. **Waste Receptacles**. Waste receptacles shall be placed near nodes of activity. Providing waste receptacles for recycling shall be considered.
5. **Bicycle Parking**. Secure short-term and long-term bicycle parking shall be located near transit stops, major destinations and bike paths.
   a) All bicycle parking shall follow Association of Pedestrian and Bicycle Professionals (APBP) guidance and include multiple points of contact for each bicycle. Wave racks that lock to a bicycle's front or rear tire and other styles that do not have a point of contact for the frame are prohibited.
   b) All bicycle parking shall comply with the standards established by the Director of Public Works.



Pedestrian, transit, and bicycle streetscape amenities

### LIGHTING

1. **General**. All site lighting shall be consistent with Illuminating Engineering Society (IES) standards to prevent over-lighting of structures and spaces, uplighting and light trespass.
2. **Street Lighting**. Street lighting shall be placed to accent facades at night, and provide security and wayfinding for building access, and public and private open spaces. Lighting that interferes with residential uses shall be avoided.
3. **Pedestrian-scale Lighting**. Pedestrian-scale lighting shall be provided at building entryways, vehicle and bicycle parking areas, seating areas, and common open space areas. All private pedestrian paths must be lit with pedestrian lights of 14 feet or less in height or bollards on at least one side of the path.
4. **Fixtures**. Low-contrast lighting and energy-efficient bulbs, such as compact fluorescent and light emitting diode (LED) bulbs shall be used for outdoor lighting.
5. **Light Intensity**. On-site pedestrian circulation areas shall be lighted to a minimum level of 0.5 foot-candles, a 1.5 foot-candle average, and a maximum to minimum ratio of seven-to-one.
6. **Screening**. All lighting tubes, bulbs, elements, wiring, conduits, etc. shall be shielded from direct visual view. Special decorative fixtures may be exempt subject to City review and approval.
7. **Exterior Lighting**. Exterior building lighting provides for safety of occupants and users. "Overflow" interior lighting can light portions of walkways etc. thereby reducing the number of fixtures.
8. **Materials and Colors**. Lighting fixture materials and colors shall be consistent throughout building and parking areas.
9. **Illumination**. Commercial lighting, including outdoor dining and along extended sidewalks, must be shielded and directed to avoid light intrusion into the residential units within the building or adjoining the buildings. Light illumination must be provided 3,500-4,000 Kelvin.



Commercial grade string lights illuminating public spaces

### SIGNAGE

1. **General**. Wayfinding signage shall be placed in the street furniture zone to help visitors navigate to major destinations, public facilities, and transit connections. Pedestrian wayfinding signage shall be vertical signage or paved markings. Wayfinding signage shall be of three types: 1) Identification signs that mark key destinations and activity centers, 2) Informational signage that provide contextual information on a point of interest, and 3) Directional signage that show the optimal route between key destinations. A successful major destination such as the Carson Civic Center will make use of all three types of signage with an emphasis on directional signage points of interest, such as a shopping district, and informational signage.
2. **Directional and Informative Signage**. A consistent color palette, fonts, materials and graphics shall be used and scaled for its purpose.
3. **Civic Buildings**. Signage on civic buildings shall be located to be visible and readable from a distance.
4. **Letter Signage**. Letter signage on buildings and walls shall be pin-mounted letters.
5. **Key Intersections**. Key intersections such as the Carson Street and Avalon Boulevard junction and gateways such as the approach from the 405 Freeway and Civic Plaza Drive junction require greater attention to detail due to their prominent locations and sensitive relationship to the public realm. The treatment of buildings and the public realm at key locations creates a landmark and establishes a unique sense of identity.
6. **Public Open Space**. There shall be a clear signed point/route of entry, with signage at the public right-of-way clearly stating that the open space is for public use and indicating hours of operation for public use.




Creative wayfinding signage as art

## PAVING

1. **Hardscape**. Paving, seating, and retaining walls shall accentuate building features such as a curved building facade by repeating forms and highlighting these forms with specimen trees or accent plant materials.
2. **Asphalt**. Asphalt shall not be used. Integrally colored concrete or acid-based stains are permitted. Water-based stains, which require more-frequent maintenance in exterior settings, shall not be used. Integrally colored precast concrete pavers, and saw-cut joint lines shall be allowed. The maximum spacing shall be 4'.
3. **Creative Treatment**. Creative and permeable paving paving treatments shall be used at unique conditions such as open spaces (e.g. plazas and courtyards), including at civic center pathways, driveways, arcades, etc. Walking surfaces shall remain smooth.
4. **High-Visibility Crossings**. Maintaining high-visibility crossings creates an intuitive and safe environment for all users. Existing crossings shall be upgraded to include continental crosswalks. At any given intersection, all crosswalks shall be of a consistent material and color.
5. **Slght Distance**. Visibility also applies to sight distance. Pedestrians should be clearly visible by motorists up to 250 feet away, which is enhanced by curb extensions.
6. **Pavers**. Pavers may be used within the right-of-way if they are earth-toned and have only subtle variations in color. Pavers shall be square or rectangular and a minimum size of 12 inches by 12 inches. Use of pavers may be subject to an IMA with the City's Public Works Department.
7. **Accents**. Paving accents, such as banding along the curb or perpendicular to the sidewalk, may be used if consistent with the established style for the district as approved by the Public Works Department.

## SPECIAL FEATURES

1. **General**. To encourage social interaction, public spaces shall be activated and given a unique identity for an area. Special features such as public art and water elements shall be encouraged. Water elements when used, shall introduce a sense of relaxation and mask traffic noise.
2. **Planning Process**. Project planning shall include public amenities wherever possible – open courtyards seating areas, water features, etc. shall be incorporated to provide congregating areas for local residents or users.
3. **Local Artists**. Local artists shall be commissioned when possible to decorate infrastructure such as utility boxes, blank walls adjacent to or visible from major arterials, and on pavement as part of temporary installations.
4. **Local Culture**. Existing cultural institutions, events, public art, and urban design features shall be preserved wherever possible. Examples of cultural events include farmers markets, art walks, festivals, block parties, holiday parties, etc.

## PARKING AREAS

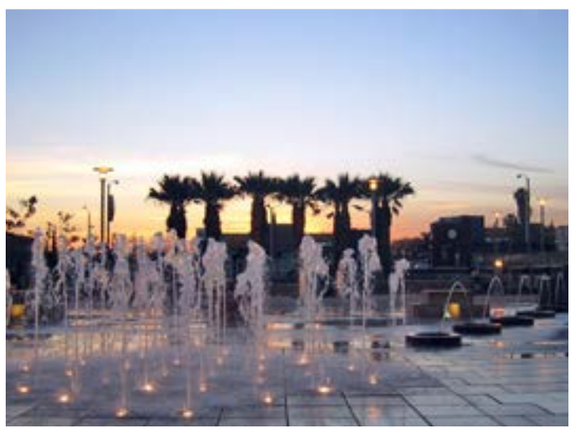
1. **Surface Parking**. Surface parking is not permitted between the building and the primary frontage. Surface parking shall be located behind the building, internal to the block, or wrapped with active uses along the public frontages.
2. **Access**. Access to parking garages, parking lots, and parking structures shall be primarily from side (non-Primary) streets or alleys where available. If access from a side streets street or alley is not possible due to lot location and/or lot/roadway configuration, vehicular entrance/exit shall have an apron configuration to maintain a level sidewalk.
3. **Ground Floor Treatment.** Parking on the ground floor of a building shall be designed as a building facade with openings. The openings shall occupy at least 50% of the facade on all sides, and they shall have a minimum width of 5 feet and a minimum height of 6 feet. The openings shall have screens, metal grills or glass. The walls of the garage shall be finished with the same material as the building above or articulated as a distinct base.
4. **Screening**. Planting shall be used to screen parking areas - such as storage areas, trash enclosures and utility equipment - from public view.
5. **Utility Boxes**. Utility boxes shall be visually hidden in below grade vaults along the primary entry faces of all buildings and on all faces that front a public space.

## SERVICE AREAS

1. **Loading and Service Areas**. Loading and service areas shall not face the primary street frontage. Loading and service areas shall not be located adjacent to common open space areas or ground-level residential units.
2. **Screening**. Planting shall be used to screen service areas - such as storage areas, trash enclosures and utility equipment - from public view. A buffer hedge planted in a line, closely enough to form a uniform texture can be an effective screening device. Hedges shall be shockproof, tough and evergreen. Fast-growing species shall be used to adequately screen elements by 50% within the second year of plant establishment.
   a) Mechanical equipment at all levels of the development including rooftop equipment, shall be screened from view (including ground-mounted, wall-mounted, and roof-mounted air conditioning, duct work, utility meters, back-flow preventers, transformers, etc.). Screening strategies for ground-level equipment and service areas shall include walls, landscaping or combinations of materials. Low walls which extend from the building shall screen mechanical equipment or service areas so long as they are on the sides or rear of the buildings and not facing a public street, plaza or green. Chain link fences shall be prohibited.
   b) Waste receptacles and dumpsters shall be screened by an enclosure in compliance with the Carson Municipal Code. Landscaping shall be utilized to screen the trash enclosure on all sides visible from a public right of way or parking lot. The landscaping shall consist of hedges or of trees with a minimum 36" container size to be maintained between four and five feet in height. Trash enclosures and waste receptacles on rooftop open spaces shall be covered and concealed from view.



Special paving for open spaces and pedestrian pathways



Special features as opportunities for unique experiences



Landscaping as surface parking enhancements



Screening of service areas as art

## 4.4. BUILDING STANDARDS

The design of buildings plays a key role in the attractiveness, activity, and safety of the area. Creating building design that enhances sense of place for the City of Carson Civic Center needs to allow for potential future development that respond to future demand, flexibility, and unique features such as destinations and mixed-use civic activity centers, city landmarks, open space, and other private and public realm components. Thoughtful building design is essential for creating attractive, active, and safe environments for civic resources and activity.

### STYLE

All buildings shall be designed in contemporary architectural styles. Traditional or historic styles shall not be allowed. While the building styles depicted in the renderings are not meant to mandate any stylistic direction, they are intended to convey the vision of creating a Civic Center that is not historicist or classical in its aesthetic.

1. **Horizontal Wall Plane Variation**. To break up massing along the building's horizontal axis, facades visible from a public right-of-way and over 50 feet in length shall have a minimum of one (1) horizontal wall plane offset. One (1) additional offset in the wall plane shall be provided for each additional 50 feet.
   a) Each offset shall have a depth of at least three (3) feet from the adjacent wall plane and a minimum horizontal length of ten (10) feet.
   b) Each offset shall span, at a minimum, at least 80% of the floors overall up to, and including, the 5th floor.





Flexibility of style expresses a contemporary iconic aesthetic

### FACADE ARTICULATION

The following standards apply to all projects in the Specific Plan area.

1. **Blank Walls**. The maximum width of a bay of blank wall (defined as a wall area without a feature in relief or protrusion of at least 6 inches) shall be limited according to the standards below. The standards apply to all stories on all facades that are visible from a street, sidewalk, or other public right-of-way.
   a) For building frontages of 100 feet or more, the maximum width of a bay of blank wall shall not exceed 25 feet, measured horizontally.
   b) For building frontages of less than 100 feet, the maximum width of a bay of blank wall shall not exceed 25% of the overall façade width, measured horizontally.

### ALL-SIDED ARCHITECTURE

Buildings shall be designed with common treatments on all sides visible from a public right-of-way, including architectural themes, detailing and articulation, massing, and materials.



Articulation can vary in form, massing, and material

### GROUND FLOOR TREATMENT

1. **Commercial Storefronts**. The primary entrance to each commercial space on the ground floor shall be located on the front facade and be larger in size than the secondary entrance.. Each ground-floor commercial tenant space adjacent to the sidewalk shall locate the primary entrance on the front facade, with direct at-grade access from the sidewalk.
2. **Shopfront frontages**. Clear, nonreflective glass shall comprise at least 60 percent of the ground-floor street facade.
3. **Ground Floor Height**. Ground-floor height (floor-to-ceiling) for non-residential principal floor area shall be a minimum of twelve feet (12'). Ground-floor height for residential shall be a minimum ten feet (10').
4. **Entries, Doors and Windows**. All ground-floor windows shall have an external reflectance of less than 15%, and a transparency higher than 80%.
   a) Entries, doors and windows can be highlighted with awnings, bright colors, special paving, or coordinated graphics to clearly indicate building access and provide relief from flat, blank continuous facades.




Engaging the ground floor through variation

## DESIGN STANDARDS FOR ACTIVE GROUND-FLOOR USES

Active, building frontages in these locations shall incorporate design standards, presented in this Section, that can accommodate active and pedestrian-oriented ground floor uses.

1. **Commercial Storefronts**. The primary entrance to each commercial space on the ground floor shall be located on the front façade and open onto the pedestrian-oriented frontage. Each ground-floor commercial tenant space adjacent to the sidewalk shall locate the primary entrance on the front façade, with direct at-grade access from the sidewalk.
2. **Ground Floor Height**. Ground-floor height (floor-to-ceiling) for non-residential principal floor area shall be a minimum of twelve feet (12'). Ground-floor height for residential principal GFA shall be minimum ten feet (10'). Accessory GFA shall be exempt from the ground-floor height requirement.
3. **First-Floor Elevation.**
   a) The first level of buildings that require active, pedestrian-oriented uses shall have a floor elevation that is level with the elevation of the adjacent sidewalk at entries.
   b) Residential uses may have a ground floor level above the adjacent sidewalk grade, only when creating a stoop or porch frontage directly accessible from the sidewalk.
4. **Transparency**.
   a) For areas with active, pedestrian-oriented uses, nonreflective glass shall comprise at least 60 percent of the ground-floor street facade. Interior blinds, drapes, posters, signage, and interior shelving for product displays visible for the public right-of-way shall obscure no more than 20 percent of the transparent areas of each respective storefront.
   b) To satisfy the above requirements, glass shall have an exterior daylight reflectance of no more than 8%.

## FENESTRATION

1. **General**. Buildings shall minimize wall expanses without glazed openings, by complying with one of the following standards:
   a) For building facades 100 feet or more in length, the maximum horizontal width of wall without a glazed opening shall not exceed 25 feet, applicable to all floors.
   b) For building facades less than 100 feet long, the maximum horizontal width of wall without a glazed opening shall not exceed 25% of the overall facade.
2. **Security Doors/Grilles**. Metal security doors and exterior security grilles are prohibited.
3. **Display Windows**. The height of the bottom sill of required windows shall not exceed 30 inches above the adjacent sidewalk or walkway. The minimum head height for storefronts and windows at the ground floor shall be a minimum of 96 inches above the adjacent sidewalk or walkway.
4. **Tinted Glass**. Clear or tinted glass in metal frames are permitted. Bronze or black-tinted glass is not permitted.
5. **Reflectivity**. Non highly reflective glass (30% maximum reflectivity).
6. **Ground Floor Glazing**. Ground Floors, along pedestrian routes, are to be a minimum of 60% glazed with clear glass.

## MATERIALS

1. **Material and Color Variation**. Each building elevation shall contain a combination of at least two (2) – but no more than four (4) – different colors and/or materials (including wall planes and trim).
   a) Trim color/material may be used to satisfy up to two (2) of the individual color/material elements.
   b) Glass used in windows and doors is excluded from satisfying this requirement, except glass used as part of a curtain wall facade area may qualify as a material variation.
   c) Each color or material (excluding trim) shall cover at least ten (10) percent of the facade area.
   d) Changes in material shall not occur at the outside corners of intersecting walls.
2. **Materials/Finishes Allowed**. Precast concrete, GFRC, Cast in place architecturally exposed concrete, Metal cladding, Stone cladding, Glass curtain wall, high-quality fiber cement, and terracotta.
3. **Accent Materials/Finishes Allowed.** GFRC Trims, Finished Metal.
4. **Accessory Structures**. On-site accessory structures, such as bus shelters, kiosks, gazebos, etc., shall incorporate two colors and materials from the palette used for the principal structure.
5. **Stucco – Residential Buildings**. Stucco is not permitted at the ground level but can be integrated into upper floors. Smooth, fine-textured finishes including Sand Float 30/30, smooth finish steel trowel are permitted on upper floors. Not permitted are irregular, medium, or coarse-textured finishes like heavy lace, Sand Float 16/20 or 20/30, machine dash, or light lace.
6. **Stucco – Non-Residential and Mixed-Use Buildings**. Stucco is not permitted.
7. **Wood siding**. Horizontal wood siding and wood trim are prohibited except for residential-only structures four stories or less, and window and door frames (typically found in the older residential neighborhoods of Downtown).
8. **Architectural Foam**. The use of architectural foam shall be limited to exterior trim and moldings. Architectural foam density shall have a minimum density of 1.5 pounds per cubic feet (PCF).
9. **CMU - Residential Buildings**. Concrete Masonry Units (CMUs) shall be finished with a smooth or textured treatment (e.g., glazed, burnished, polished, raked, or light sandblast) at the ground floor.
10. **CMU - Non-Residential and Mixed-Use Buildings**. Concrete masonry units shall have a ground face and be burnished and honed.
11. **Graffiti Resistance**. Materials at the pedestrian level shall use materials that are graffiti resistant or easily repainted.



Bridging ground floor activity with upper floor treatment



Fenestration along pedestrian routes to provide transparency



Facades using different types of materials for visual interest



Stucco should have a smooth, not coarse, texture.

## ARCHITECTURAL LIGHTING

A. BUILDING LIGHTING

Buildings shall be designed to use minimal external lighting (limited to pedestrian safety needs) and to minimize direct upward light, spill light, glare, and artificial night sky glow. Buildings shall also be designed to minimize light pollution from interior lighting to the maximum feasible extent. Lighting Design shall comply with the following standards:

1. **Light Trespass.**
    a. Building lighting shall be shielded and directed downward. Up-lighting is prohibited.
    b. Exterior lighting shall be designed and located to not project off-site or onto adjacent uses.
    c. Red and blue lights shall be limited to only those necessary for security and safety warning purposes, warm-white lights or filtered LEDs designed to minimize blue emissions shall be used.



## SIGNAGE

Signage for the Civic buildings such as the new City Hall and the Performance Arts Center, signage for Retail uses, and signage for residential buildings shall be individually mounted letters.

## AWNINGS, CANOPIES, AND MARQUEES

1. **Minimum Vertical Clearance**. The minimum vertical clearance between the ground or street level and any projecting awning or canopy shall be eight (8) feet.
2. **Zero Build-to Line**. In areas of zero-foot build-to lines, awnings, canopies, and marquees shall not project more than 4 feet into public right-of-way. Encroachments that are designed to require ground support are prohibited. In areas where setbacks are required, awnings, canopies, and marquees shall not project past the setback line.




## PARKING STRUCTURE DESIGN

These standards apply to 1) parking structures integrated with the main building (e.g., "parking podiums"), 2) parking structures attached to a main building (including "wrapped" parking structures), and 3) freestanding parking structures. Parking structures shall comply with applicable sections of the Zoning Regulations, in addition to the standards below.

A. ACTIVE GROUND-FLOOR USES

On building street frontages, at least 50 percent of the overall linear frontage shall incorporate ground-floor uses.

B. ACCESS AND CIRCULATION

1. **Access**. Access to parking structures/levels, including underground parking, shall be from side streets, driveways, or alleys to the degree possible. Garage entrances shall not exceed 25 feet in width.
2. **Parking Gates**. All parking gates located on frontages facing a public right-of-way shall have a minimum operating speed of 32 inches per second (opening) and 24 inches per second (closing), applicable for gates that open vertically or horizontally.
3. **Pedestrian Circulation**. Vertical circulation (elevator and stairs) shall be located along the primary pedestrian frontage(s) and be highlighted architecturally so visitors can easily find and access these entry points.
4. **Pedestrian Entries**. Pedestrian entries along street, alley, or paseo frontages, or facing a common or publicly accessible open space.
5. **Signage**. Signage and wayfinding shall be integrated with the architecture of the parking structure.
6. **Interior Lighting**. Lighting fixtures in parking areas, ingress/egress areas, and all internal circulation areas shall be directed and shielded appropriately to not illuminate surrounding properties, while promoting visibility for users.

C. ARCHITECTURAL TREATMENT AND SUSTAINABILITY

Whether public or private, freestanding parking structures and integrated parking podiums will be treated as buildings and shall comply with the following standards:

1. **Building Design Standards**. Parking structures shall comply with all other applicable Building Design Standards in this Section and in applicable sections of the Zoning Regulations.
2. **External Treatment**. Parking structures shall have an external skin designed to improve the building's appearance over the basic concrete structure of ramps, walls, and columns. This can include heavy-gauge metal screens, precast concrete panels, laminated glass, photovoltaic (solar) panels, landscape features, architecturally articulated walls, murals, or a combination of these features.
3. **Compatibility with Associated Buildings**.
    a. Parking structure facades integrated with – or attached/adjacent to – a primary building visible from a public right-of-way shall employ materials, colors, textures, and façade treatments that are consistent with the primary building.
    b. Parking structure levels integrated into the lower levels of mid-rise buildings or towers shall be designed with consistent main treatments, materials, and textures as the other building facades.





Signage integrated into the design of buildings









Examples of parking structure and podium articulation and screening

## 4.5. ENVIRONMENTAL DESIGN

### SITE AND BUILDING DESIGN

1. **Energy-Efficient Designs**. Passive solar and ventilation techniques, as well as specification of "green" materials shall be incorporated in building design and site planning.
2. **Topography-Appropriate Design**. The site and buildings shall be designed to capitalize on unique topographic features, where applicable, such as terracing when there are shifts in ground slope.
3. **Building Orientation for Solar Efficiency**. Buildings shall orient most windows in the north-south direction which is ideal for solar orientation. New and substantially renovated developments shall orient not less than 65% of windows and glazing in the north-south direction.
4. **Solar Panels**. The use of solar panels for the generation of electricity and water heating is encouraged.
5. **Lighting**.

    c) **Dark Sky Standards**. To minimize light pollution, reduce glare and light trespass, conserve energy, and protect human health, light shall only be applied where needed, limit light at night, use warm-colored light (3,500 to 4,000K) where possible, and lighting fixtures shall be shielded to prevent light from escaping upwards and sideways.

    d) **Lighting Fixtures**. New and substantially renovated development shall use high energy efficiency exterior lighting fixtures. Solar powered exterior lighting fixtures are encouraged.

### SMART INFRASTRUCTURE

1. **Emerging Technologies**. There are many emerging technologies that could be implemented in a way to help improve the pedestrian environment and livability of places. These technologies may include:

    a) Smart lighting for public safety within the Civic Center.

    b) Parking occupancy information to assist Civic Center visitors in efficiently and safely locate available parking stalls.

    c) Multi-modal data collection to better assist the City of Carson in prioritizing a balanced approach for providing Civic Center access to all modes of transportation.

    d) WiFi access points.

    These technologies can enable the City to make proactive decisions on corrective measures. As technology continues to evolve, the addition of Smart City Infrastructure shall be evaluated at the time a detailed streetscape designs and engineering are prepared.

### STORMWATER MANAGEMENT

1. **Sustainable Stormwater Treatment.** Site and buildings shall be designed to capitalize, where feasible, on low impact sustainable infiltration techniques and mitigation measures for sustainable stormwater facilities, as described below. Low impact sustainable design mimics the natural hydrologic process by controlling stormwater at the source and allowing it to slowly infiltrate and filter through plants and soils.

    a) **Swales**. Swales are long, narrow landscaped depressions that are gently sloped along their length. They are primarily used to collect and convey stormwater while slowing down and filtering runoff. Swales are ideal for long, uninterrupted linear spaces, such as along streets, in parking lots, between buildings, in parkways, and in medians.

    b) **Infiltration Trenches**. Infiltration trenches are subsurface facilities designed to provide onsite stormwater retention in areas of good infiltration by collecting and recharging stormwater runoff into the ground. Infiltration trenches are relatively low maintenance and can be easily retrofitted into existing sidewalk areas and medians.

    c) **Rain Gardens**. Rain gardens are landscaped detention or bio-retention facilities designed to slow down and treat stormwater. Rain gardens are often found in the public realm located within curb extensions, medians, and parking lane planters. Rain gardens can also be used in front of homes or buildings to capture rooftop runoff from disconnected downspouts.

    d) **Permeable Paving**. Permeable paving systems can provide the structural integrity necessary for cars, trucks, and pedestrian areas while reducing direct runoff by absorbing rainfall and providing temporary storage. Pervious paving is best suited for parking lots and parking lanes, low-traffic and low-speed streets, alleys, patios, driveways and emergency access roadways.

    e) **Runnels**. Runnels are concrete or stone lined rainwater conveyance systems, and reduce the need for buried drain pipe by conveying surface water to other stormwater facilities. Runnels are appropriate for most street and open space types.

    f) **Flow-Through Planters**. Flow-through planters only absorb as much water as soil and plants in the planter can accommodate. Infiltration planters are used to collect, filter, and infiltrate runoff from roofs, streets, sidewalks, driveways and patios.

    g) **Curb Extensions**. Curb extensions are an extension of the street edge into the street. They are often used to promote traffic calming but can provide stormwater benefits as well. Stormwater flowing along the street is slowed, filtered, and allowed to infiltrate before reaching storm drain networks. Curb extensions can take on the characteristics of bio-retention areas, swales, or planters.



Energy efficient design through materials and orientation




Smart infrastructure efficiently lights wayfinding signage





Sustainable stormwater collection beautifies and enhances streetscapes and open spaces in the public and private realms

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# 5: MOBILITY PLAN

The Carson Civic Center area is a central hub of activity in the City of Carson – business, tourism, housing, and civic resources all coexist within and adjacent to the CCC Specific Plan area. The diversity of land uses and transportation options help make the Civic Center a desirable destination that strives to be accessible to all. The Civic Center area has seen an increase in residential density and mixed-uses in recent years, and the mobility and streetscape plan will continue to emphasize the compact footprint and interconnectivity between social, civic, economic, and local attractions that make the Civic Center unique. The strategies outlined in this chapter provide guidance and a framework for the specific regulations set forth in Chapters 3 and 4 for Development and Design Standards. Overall, the mobility and streetscape plan will be in service of achieving the mobility, land use, and sustainability goals as outlined in the General Plan.

This chapter describes the Mobility Plan for the Civic Center Specific Plan Area, which includes recommendations for improving pedestrian, bicycle, transit, and vehicular circulation as well as parking management. The plan focuses on opportunities to enhance connectivity, including safe, efficient, and accessible solutions within and outside the Specific Plan area.

This Chapter supports providing multimodal improvement and connectivity considerations within both Specific Plan area, as well as supporting the appropriate Goals and Objectives of the Plan.

A planning context review of other planning efforts undertaken by the City or County are included in the introduction chapter. From these documents, the applicable strategies and/or policies that relate to the Carson Civic Center Specific Plan area were prioritized for the development of the Mobility Plan.

## 5.1. MOBILITY STRATEGY

The mobility plan puts connectivity and parking considerations at the center of the analysis recognizing their importance for meeting land use, economic development, and quality of life goals. The plan underlined in this chapter presents strategies that support reductions in vehicle miles traveled (VMT) by:

A. Creating a quality walking experience through improving pedestrian connectivity to support new development

B. Encouraging the use of active transportation and public transit

C. Establishing an effective parking management plan

The following summarizes the multi-modal components under the mobility strategy as described in this section.

1. **Streets:** This section describes the proposed configurations of the roadways in the Specific Plan Area. They include proposed streetscape and complete streets (i.e., bicycle, pedestrian, and transit) designs, and are mapped in the diagrams on the adjoining page.

2. **Pedestrian Circulation:** This section presents the project's influence on the pedestrian realm including recommendations for improving circulation and safety. These measures are focused around providing a "complete streets" approach, and includes enhanced pedestrian infrastructure along Carson Street and Avalon Boulevard. Figures in the following pages show proposed locations of the pedestrian enhancements in the Specific Plan Area, reflecting the final streetscape components.

3. **Access to Transit:** This section provides an assessment of how the land use will influence access to transit, particularly the transit hubs along Avalon Boulevard and the new Civic Center Drive. This section shows the proximity of transit lines and stations to proposed development.

4. **Vehicular Mobility**: This section describes considerations related to vehicular mobility, based on the proposed land Use and circulation network modifications. The vehicular mobility considerations are developed in support of the Specific Plan's vision and goals.

5. **Parking**: This section focuses on strategies and policies related to required parking for land uses included within the Plan. A summary of any potential impacts to on-street and off-street parking, as a result of both circulation network and land use changes, is outlined in this section. See Chapters 3 and 4 Development and Design Standards for parking requirements.

## 5.2. EXISTING STREETS

The general characteristics of the existing roadways within the study area, including number of lanes, roadway classification, posted speed limit, and orientation, are described in this section:

**Avalon Boulevard**, oriented in a north-south direction, is designated as a Major Highway. The roadway consists of three lanes in each direction north of Carson Street and two lanes in each direction south of Carson Street. The roadway has a posted speed limit of 35 mph, with on-street parking permitted south of Carson Street and prohibited north of Carson Street. Direct access to I-405 is provided along Avalon Boulevard via northbound and southbound off/on-ramp intersections.

**Carson Street**, oriented in an east-west direction, is designated as a Major Highway. The roadway generally consists of two lanes in each direction in the study area, with the exception of a short segment between Bonita Street and the I-405 Southbound Ramps where three lanes in each direction are provided. The roadway has a posted speed limit of 40 mph. The roadway is a Class III bike route (i.e., with sharrows) in the study area. On-Street parking is generally prohibited in the immediate study area, though is permitted west of Via Verde. Direct access to I-405 is provided along Carson Street via northbound and southbound off/on-ramp intersections.

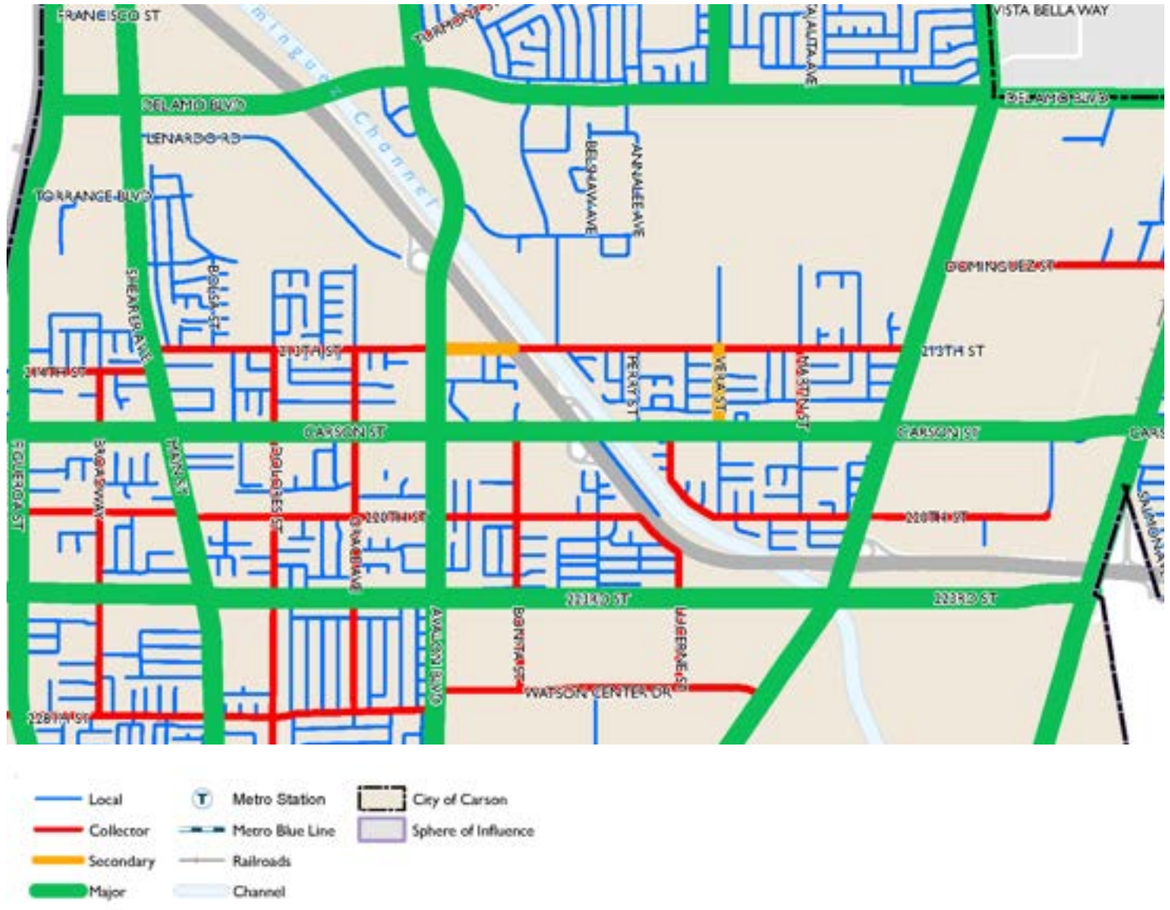
**213th Street**, oriented in an east-west direction, is designated as a Collector west of Avalon Boulevard and as a Secondary street east of Avalon Boulevard (to the I-405 freeway). The roadway consists of two lanes in each direction in the near vicinity of the Avalon Boulevard intersection and transitions to one lane in each direction further away on each side. The roadway has a posted speed limit of 30 mph and on-street parking is generally permitted, with the exception of the south side of the street east of Avalon Boulevard.

**Civic Center Drive**, oriented in a north-south direction, is designated as a Local Street. The roadway consists of one lane in each direction and runs between Desford Street and Carson Street. The roadway has a posted speed limit of 40 mph. Civic Center Drive provides direct access to City Hall.

**Desford Street**, oriented in an east-west direction, is designated as a Local Street with direct residential frontage. The roadway consists of one lane in each direction with on-street parking permitted on both sides. Within the study area, Desford Street is discontinuous on the west at Avalon Boulevard and on the east at Bonita Street.

Carson Street, Avalon Boulevard, Desford Street, Civic Center Drive and Civic Plaza Drive are roadways that are adjacent to the project site. Carson Street and Avalon Boulevard both provide approximately 6 to 10-foot wide sidewalks with or without landscaping on both sides of the roadways. Civic Plaza Drive also provides a short segment of 6-foot wide sidewalks on both sides of the roadways into the existing sidewalks built internally within the site to connect to the existing buildings. In contrast, Civic Center Drive consists of a sidewalk only on the east side of the roadway, while the west side lacks pedestrian infrastructure, resulting in a gap that may affect pedestrian safety.

**Figure 5-1** Carson General Plan Street Classification






Avalon Boulevard



Carson Street

## 5.3. PROPOSED STREET CONFIGURATIONS

**Figure 5-2** Carson Street

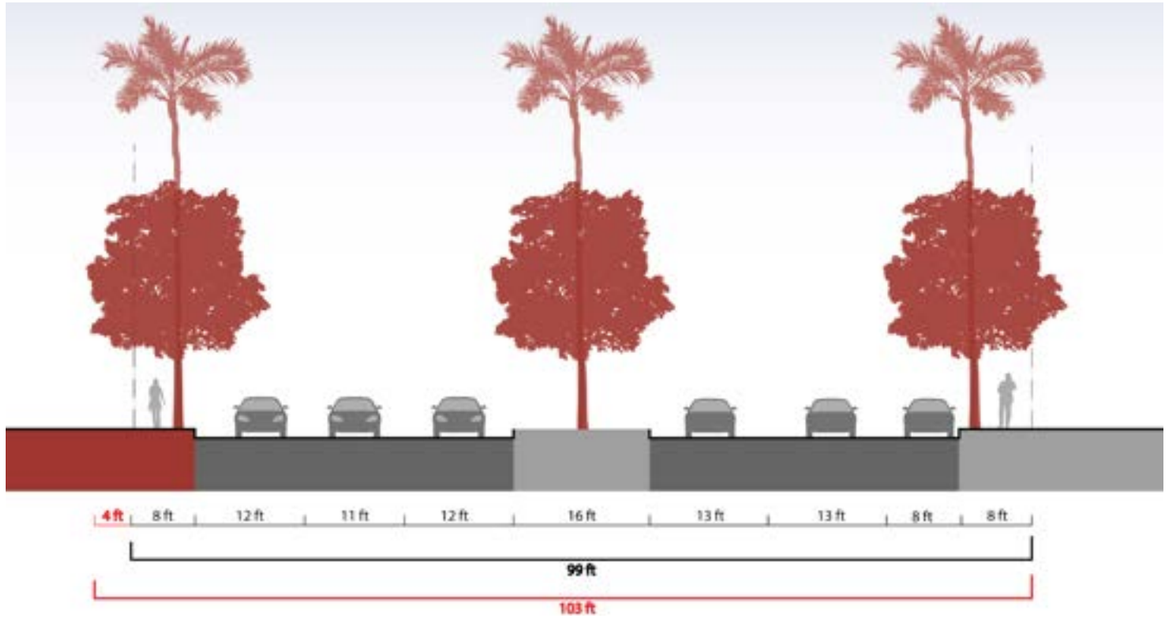



**Figure 5-3** Avalon Boulevard

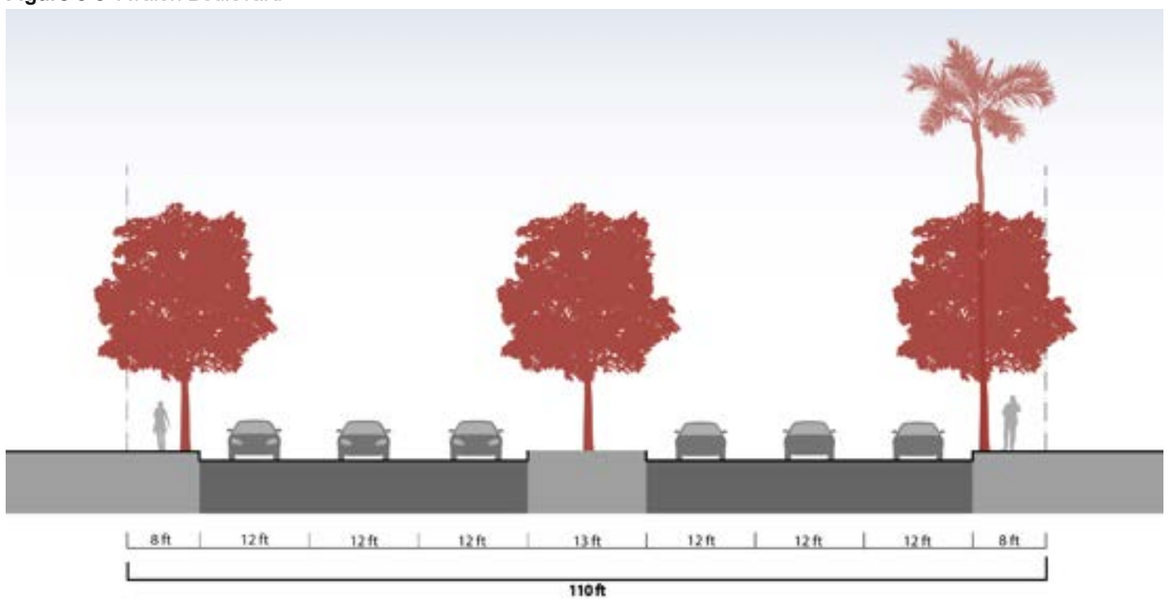



**Figure 5-4** New Street North

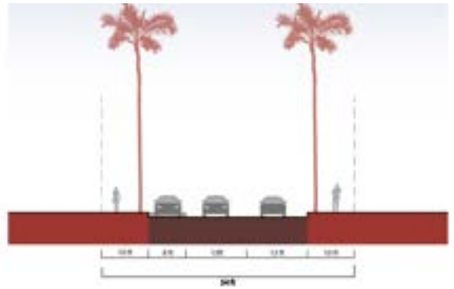


**Figure 5-5** New Street Jewel Plaza

**Figure 5-6** New Street South

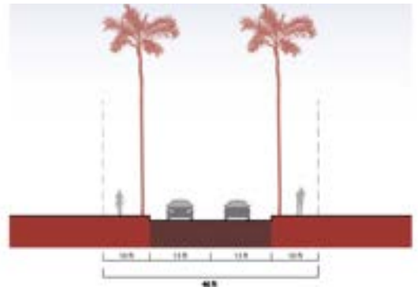


**Figure 5-7** Desford Street

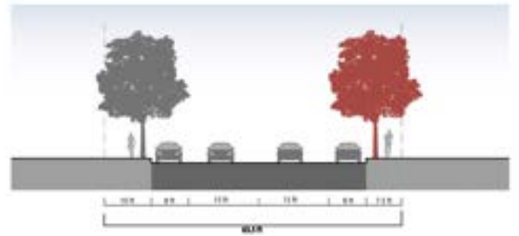


**Figure 5-8** Private Roadway

**Figure 5-9** Civic Plaza Drive

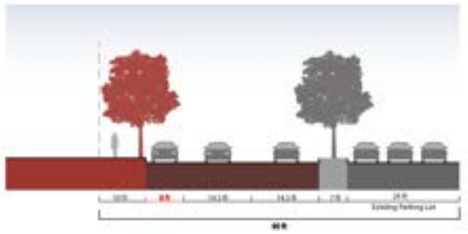
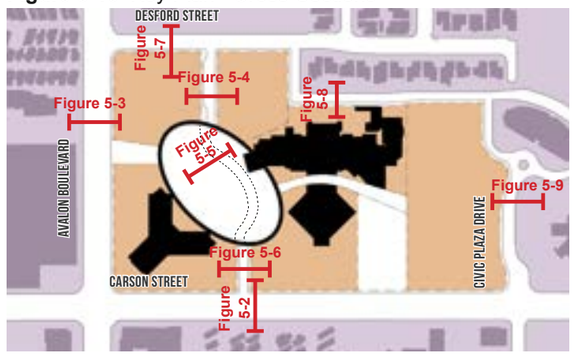


**Figure 5-10** Key Plan - Cross-Sections




Proposed
Existing

## 5.4. PEDESTRIAN CIRCULATION & IMPROVEMENTS

The strategies in this section are developed in support of the project's Goals and Objectives to improve connectivity to key destinations, and to enhance the public realm and streetscapes.

**Sidewalk/Parkway Widths**

The Carson streetscape is equipped with approximately eight-foot-wide sidewalks in both eastbound and westbound directions. There are no parkways and few shade trees that separate the sidewalks from the roadways. Sidewalks are generally in good condition, but due to the narrow width, there are few streetscape amenities.

The Avalon Boulevard streetscape has sidewalks in both northbound and southbound directions, also with approximately eight-foot-wide sidewalks. The sidewalks are generally in good condition which also includes trees in tree wells, utility poles, and signage. Raised planted medians are installed along Avalon Boulevard from 223rd Street north to the South Bay Pavillion Mall past the 405 Freeway. Overall, Avalon Boulevard is walkable, but lacking a pedestrian-friendly environment.

All sidewalks are observed to be in good condition, but parkways are only installed along Desford Street. Sidewalks need to provide at least four feet of clear space to allow pedestrians and those in wheelchairs to pass. However, this is the absolute minimum specification, and most corridors would benefit from at least five to ten feet of clear space, plus additional space for street trees, street lighting, signage, bus stops, and utility poles as necessary.

For highly trafficked areas, such as Carson Street and Avalon Boulevard, a minimum of 8 feet of sidewalk shall be provided in order to support increasing pedestrian volumes in the proposed mixed-use area and to also be able to accommodate the street trees, benches, outdoor seating, and other amenities in support of storefront frontage within commercial or mixed-use designated zones.

For other streets within the Specific Plan Area, sidewalks can be a minimum width of ten feet to accommodate moderate levels of pedestrian activity and some pedestrian amenities.

**Curb Ramps**

While most intersections already include curb ramps, curb ramps shall be updated to include tactile warning strips and be oriented to align with the pedestrian travel path that is perpendicular to crossing streets, which in many instances leads to dual curb ramps at each corner. This is preferable to the existing condition of a single curb ramp at the corner of an intersection that opens to the diagonally opposite corner.

**Pedestrian Visibility**

Maintaining high-visibility crossings creates an intuitive and safe environment for all users. Existing crossings shall be upgraded to include continental crosswalks. Continental crosswalks use striped bands to mark the crossing area in order to provide the highest visibility for both pedestrians and motorists. They indicate where pedestrians shall cross streets and indicate to motorists where pedestrians have the right-of-way. This is especially true for those junctions along Carson Street and Avalon Boulevard. Visibility also applies to sight distance. Pedestrians should be clearly visible by motorists up to 250 feet away, which is enhanced by curb extensions as noted below.

**Curb Extensions (Bulb-outs)**

A curb extension is a portion of the sidewalk that is extended into the on-street parking lane, typically at intersections. Where there is on-street parking approaching an intersection along Carson Street or Avalon Boulevard, a curb extension should be considered. Curb extensions reduce the distance that pedestrians need to walk to cross the street, make pedestrians more visible to motor vehicles, cause drivers to reduce speed by narrowing the roadway, and provide space for pedestrian amenities (e.g., street furniture, bike racks, etc.) and environmental elements (e.g., bioswales).

Curb extensions are optimal at intersections where right-turning volumes are limited, as the design precludes the ability to provide a dedicated right-turn lane.

**Pedestrian Scale Lighting**

A dark, unlit sidewalk is a deterrent to many when considering a short walk to or from a mixed-use environment including recreational open space. Pedestrian scale lighting can create a more aesthetically pleasing and comfortable environment to walk in. Street lighting improves streetscapes by improving security and visibility for pedestrians and rolling modes. As the Specific Plan Area is developed and redeveloped and streetscape design and engineering drawings are proposed for the conceptual improvements shown in this Plan, pedestrian scale lighting should be evaluated to ensure lighting uniformity within the Carson Civic Center Specific Plan Area. Multi-use paths can also benefit from pedestrian-scale lighting. Intersections often require additional lighting to allow motorists to see pedestrians crossing. Future lighting should also be integrated with potential smart city infrastructure.

**Street Amenities**

Street furniture should be utilized to promote walkable and active corridors, and enhance a sense of place. Benches, water fountains, trash receptacles, and bicycle parking racks are recommended types of street furniture because they address needs that a pedestrian may have, such as a place to rest. Street furniture should be placed outside of the walking zone as to not create a hazard to pedestrians. In constrained sidewalk conditions, street furniture should be placed on curb extensions or integrated into private development within a required area dedicated to the public realm.

In addition, transit stop amenities such as shelters with overhead protection, seating, and lighting are important amenities for encouraging people to make use of public transit.

**Street Trees**

The City of Carson was recognized as a 2021 Tree City USA by the Arbor Day Foundation for its commitment to urban forestry and tree management. Street trees serve a variety of urban design functions such as acting as a pedestrian buffer from vehicular traffic, accentuating spaces, creating a sense of enclosure, improving air quality, reducing of heat island effect by providing shade and filtered light, and improving visual aesthetics along corridors. Street trees shall be incorporated whenever possible in accordance with the landscape standards. The preservation of mature, healthy trees is a goal for the Specific Plan Area. It is recommended that in cases where streetscape improvements require relocation of mature trees, they be moved to curb extensions where conditions permit, and/or within the width of the dedicated portion of sidewalk in the adjacent private property setbacks.

**Pedestrian Signals**

Pedestrian push buttons, countdown signals, and signal timing modifications provide additional control and information for pedestrian crossing decisions. Pedestrian push buttons shall be in compliance with the Accessible Pedestrian Signals (APS). APS shall include countdown timing functionality in order to improve pedestrian safety by displaying the amount of time available to finish crossing before the end of the signal phase, as well as audible walk indications and beaconing.

**Wayfinding**

Key intersections and gateways such as the Carson Street and Avalon Boulevard junction require greater attention to detail due to their prominent locations and sensitive relationship to the public realm. Wayfinding improvements can help visitors navigate to major destinations and transit connections. Special wayfinding signage can mark the entrance or direction to a particular destination. Wayfinding signage can be divided into three categories. Identification signage marks important destinations, while informational signage provides more background information on a point of interest. Directional signage shows the optimal route between key destinations. A successful strategy will incorporate all three types.

In addition, the treatment of buildings and the public realm at key locations creates a landmark and establishes a unique sense of identity.

**Smart City Infrastructure**

There are many emerging technologies that could be implemented in a way to help improve the pedestrian environment and livability of places. These range from smart lighting to parking occupancy information, multi-modal data collection, WiFi access points, and traffic safety monitoring solutions. These technologies can enable the City to make proactive decisions on corrective measures. As technology continues to evolve, the addition of Smart City Infrastructure shall be evaluated at the time a detailed streetscape design and engineering are prepared.

**Connectivity Enhancements**

For the proposed transit hub at the Civic Center, first/last mile connections from the station will enhance transit ridership and providing alternatives to vehicular modes.

The City of Carson should be proactively involved in seeking partnerships and funding opportunities to help fund the anticipated public realm and infrastructure improvements. Adjustments may need to be made to accommodate the improvements identified in first/last mile plans produced by the transit agencies serving the Specific Plan Area.

## 5.5. ACCESS TO TRANSIT

### EXISTING TRANSIT INFRASTRUCTURE

The roadways in the Civic Center study area are served by the following transit providers:

- **Los Angeles Metro** - Route 246 providing weekday and weekend service
- **Long Beach Transit** – Routes 2 and 4, providing weekday and Saturday service
- **Torrance Transit** – Route 3 providing weekday and weekend service, Route R3 providing weekday service only

The locations of the bus stops for each provider, per intersection in the vicinity of the Civic Center, are summarized in Table 4 and shown on Figure 4.

### TRANSIT ACCESS IMPROVEMENTS

The strategies for improved access to transit and increased transit usage will be developed in support of the project's goal to foster transit use and its associated objectives which include establishing Carson Street and Avalon Boulevard as transit priority corridors and inclusion of new bus shelters and seating at bus stops. Where feasible, the Plan recommends adding bus shelters at all bus stop locations within the area. This will depend on the balance between available right-of-way and sidewalk widths at each individual location.

Consideration of first/last mile connectivity will be important. The planned pedestrian crossings will be located near current transit stops to facilitate easier access. For example, new pedestrian crossings are proposed at the Carson Street/Avalon Boulevard intersection with a stop in both directions.

There is a desire for improved transit service and reliability, which could ultimately lead to increased usage. As the land use plan builds out, the City, with the transit agencies, could continue to study transit demand and patterns.

**Figure 5-11** Pedestrian and Vehicular Circulation



Existing Buildings
Drop-Off Area
Vehicle Circulation
Pedestrian Circulation

**Figure 5-12** Transit Access




**Legend**
- Project Site
- LA Metro Bus Stop
- Long Beach Transit Bus Stop
- Torrance Transit Bus Stop

## 5.6. VEHICULAR MOBILITY

### 5.6.1 EXISTING TRAFFIC CONDITIONS

This section presents the existing traffic volumes and operations at key intersections in the vicinity of the Civic Center Specific Plan area. The Civic Center Specific Plan was evaluated to determine the project's effects on local transportation. Existing traffic counts were collected in May 2025 (during a typical weekday), forecasted future intersection traffic volumes were developed based on the existing counts, and local intersection operations were evaluated. Traffic operations are characterized using the concept of level of service (LOS). Level of service is defined by a range of grades from A (best) to F (worst). Traffic analysis was performed at seven (7) key intersections in the vicinity of the SP, including I-405 freeway interchange intersections along Avalon Boulevard and Carson Street. Based on consultation with the City of Carson, the following seven (7) intersections were selected for operations analysis:

1. Avalon Boulevard/I-405 Northbound Ramps;
2. Avalon Boulevard/I-405 Southbound Ramps;
3. Avalon Boulevard/213th Street;
4. Avalon Boulevard/Carson Street;
5. Bonita Street/Carson Street;
6. I-405 Southbound Ramps/Carson Street; and
7. I-405 Northbound Ramps/Carson Street.

Figure 1 shows the study intersection locations in relation to the Civic Center Specific Plan area.

### 5.6.2 EXISITNG TRAFFIC VOLUMES

Existing traffic counts were collected in May 2025, during a typical weekday with local schools in session. All counts were conducted during the morning peak period (7:00 – 9:00 a.m.) and evening peak period (4:00 – 6:00 p.m.). The existing conditions LOS analysis is based on the highest single hour of traffic during each time period at each location. Figure 2 shows the existing peak hour traffic volumes at the intersections. In addition, Iteris obtained 24-hour roadway segment volumes from the City of Carson. The following summarizes key takeaways from the collection of vehicle volumes:

- Traffic volumes along Avalon Boulevard in the study area were consistent across both north and south of Del Amo Boulevard with more than 25,000 daily trips.
  - Avalon Boulevard between 223rd Street and Del Amo Boulevard – 25,180 ADT
  - Avalon Boulevard between Del Amo Boulevard and Victoria Street – 27,820 ADT
- Daily traffic volumes along Carson Street were higher by approximately 8,000 daily trips west of Avalon Boulevard than east Avalon Boulevard in the study area (23,600 ADT west of Avalon Boulevard and 16,900 east of Avalon Boulevard).

### 5.6.3 TRAFFIC ANALYSIS METHODOLOGY

The quality of traffic operations is characterized using the concept of level of service (LOS). Level of service is defined by a range of grades from A (best) to F (worst). At intersections, LOS "A" represents relatively free flow operating conditions with little or no delay. LOS "F" is characterized by extremely unstable flow conditions, severe congestion and delays with traffic volumes at or near the intersection's design capacity. This typically results in long vehicular queues extending from all approaches of an intersection.

Per the City's guidelines, LOS analysis is performed using the Highway Capacity Manual (HCM) methodology, which uses vehicular delay criteria to determine LOS. The City aims to achieve LOS D or better as the minimum operating thresholds for intersections, with exceptions of the following:

- Transit Priority Areas
- High quality transit corridors
- Central/neighborhood business districts with multimodal access critical to local travel
- Locations currently operating at LOS E/F without projects

Table 2 presents a brief description of each LOS letter grade.

In order to estimate the number of new trips expected to be generated by the SP, the net trip generation for the proposed project was calculated based on trip rates published in Institute of Transportation Engineers (ITE) Trip Generation Manual, 12th Edition. Given the mixed-use nature of the development consisting of diverse types of facilities, trips are expected to be made internally from one facility to another. For example, it is likely that a hotel visitor may use the fine-dining restaurant or one of the retail stores within the development. Internal trip capture rates from ITE Trip Generation Handbook, 3rd Edition were used to develop the internal trip capture numbers. These internal trips were then used to reduce both the a.m. and p.m. peak hour trip generation. The proposed SP is forecast to generate approximately 507 net a.m. peak hour trips and 496 net p.m. peak hour trips.

### 5.6.4 INTERSECTION LOS ANALYSIS

Based on the traffic counts and methodology as described, the existing levels of service at the study intersections were evaluated. In addition, Iteris acquired the most recent traffic signal timing information, from the City of Carson and Caltrans, to utilize in the analysis. The existing intersection levels of service are summarized in Table 3. Figure 3 shows the intersection lane configurations. Level of service calculation worksheets are included in Appendix B.

As shown in Table 3, all study intersections currently operate at LOS C or better during both the a.m. and p.m. peak hours, with the exception of the Avalon Boulevard/Carson Street intersection. The Avalon Boulevard/Carson Street intersection is the only intersection that operates at LOS D, with an average intersection delay of 45.1 seconds during the a.m. peak hour and 49.4 seconds during the p.m. peak hour. This is a key intersection in the City where two major roadways intersect, adjacent to the project site. Carson Street also provides a direct access to the freeway; thus, northbound right-turning movement and westbound left-turning movement are both heavily utilized during both a.m. and p.m. peak hours. All study intersections operate at LOS D or better under the existing conditions during both a.m. and p.m. peak hours, and are considered acceptable.

### 5.6.5 CONCLUSION

The purpose of the LOS analysis is to identify locations where additional traffic volumes could potentially result in deficient operations. The proposed Specific Plan is forecast to generate approximately 507 net a.m. peak hour trips and 496 net p.m. peak hour trips. The study intersections in the vicinity of the SP are forecast to generally experience slight increases in average vehicle delays and LOS with the proposed project. However, all study intersections are anticipated to continue to operate at acceptable levels of service during both the a.m. and p.m. peak hours. Among the intersections analyzed, the Avalon Boulevard/Carson Street intersection is forecast to operate at LOS D while the other intersections are forecast to operate at LOS C or better. An intersection operating at LOS D is considered an acceptable condition.

### 5.6.6 REGIONAL MOBILITY

The Civic Center SP was evaluated to determine the project's effects on regional mobility, consistent with California Environmental Quality Act (CEQA) guidelines. Under current CEQA guidelines, projects are generally measured against four criteria (T-1 through T-4, per Appendix G Environmental Checklist), which utilize a combination of qualitative and quantitative analyses. Three of the four criteria (T-1, T-3, T-4) involve qualitative analyses, which evaluate whether the project would be inconsistent with other transportation plans, whether the project would result in hazards due to geometric design, and whether the project would result in inadequate emergency access. The SP is forecast to result in less than significant CEQA impacts under these three criteria.

For impact criteria T-2, the SP project's effects on Vehicle Miles Traveled (VMT) was quantitatively evaluated in conjunction with the City's thresholds of significance. The technical analysis was performed using the Southern California Association of Governments (SCAG) model, a computerized travel demand model. Iteris utilized the latest version of the SCAG Activity-Based Model (ABM) to generate the VMT statistics, consistent with previous CEQA analyses performed within the City of Carson.

Using the SCAG model, citywide VMT outputs were prepared for an existing scenario and an existing plus project scenario (which included the land use projections for the project). In addition, the project includes multiple strategies to reduce vehicle trips and VMT, such as, but not limited to, transportation demand management (TDM), increased land use densities, reduced residential parking requirements, and pedestrian network improvements. To account for these project features in the "plus project" scenario, off-model adjustments were prepared using guidance from the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions Assessing Climate Vulnerabilities, and Advancing Health and Equity: Designed for Local Governments, Communities, and Project Developers.

Based on the traffic modeling, the existing citywide VMT per service population is currently 15.50, which results in a significant impact threshold of 13.17 (i.e., 15% below 15.50) per the City's guidelines. The existing plus project VMT per service population including the Specific Plan land uses, is forecast to be 15.24. Thus, while the "plus Specific Plan project" scenario VMT per service population is forecast to improve compared to the existing citywide VMT per service population, the project is still forecast to exceed the City's CEQA threshold. Thus, this impact is considered significant and unavoidable. This finding is consistent with previous CEQA-level analyses in Carson, including the City's General Plan Update Environmental Impact Report (EIR).

**Figure 5-13** Study Location and Project Intersections




**Figure 5-14** Existing Intersection Configurations

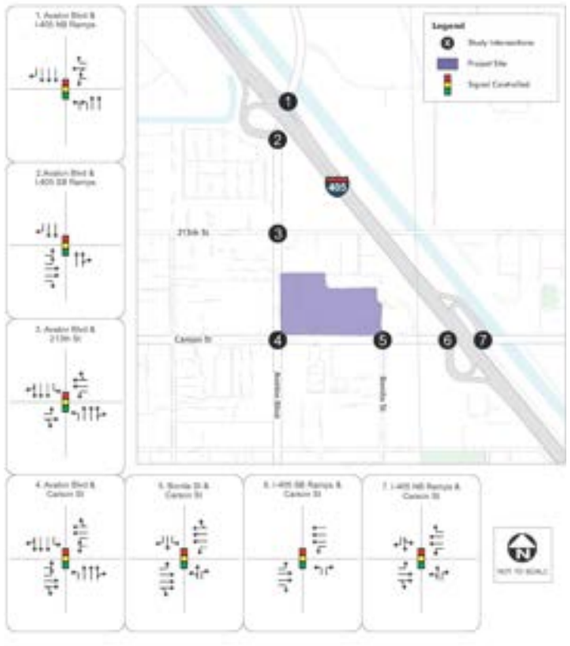


**Figure 5-15** Existing Peak Hour Intersection Volumes

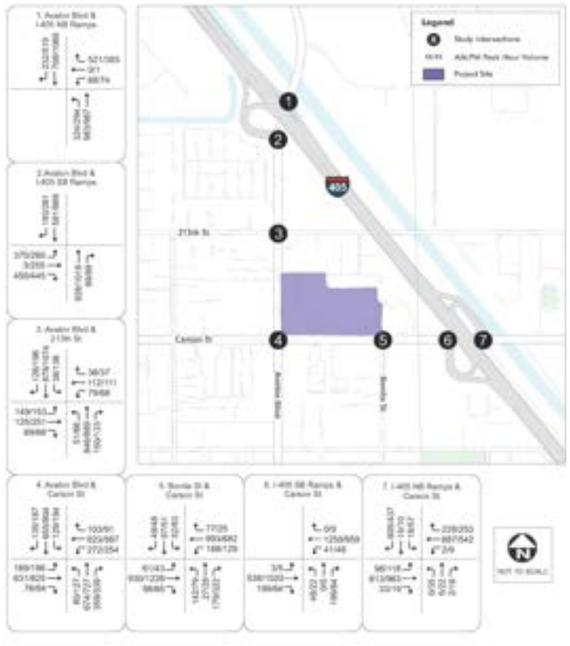


**Table 5-1** Intersection Level of Service Definitions - HCM Methodology

| Level Of Service | Description | HCM Average Delay (sec) - Signalized Intersections | HCM Average Delay (sec) - Unsignalized Intersections |
|---|---|---|---|
| A | Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation. | ≤ 10 | ≤ 10 |
| B | Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form. | >10-20 | >10-15 |
| C | Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted. | >20-35 | >15-25 |
| D | Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues. | >35-55 | >25-35 |
| E | Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes. | >55-80 | >35-50 |
| F | Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow. | >80 | >50 |

**Table 5-2** Existing Intersection Peak Hour Levels of Service

| | Intersection | Traffic Control | AM Peak Hour | | PM Peak Hour | |
|---|---|---|---|---|---|---|
| | | | Delay (s) | LOS | Delay (s) | LOS |
| 1 | Avalon Boulevard/I-405 Northbound Ramps | Signalized | 27.8 | C | 18.6 | B |
| 2 | Avalon Boulevard/I-405 Southbound Ramps | Signalized | 17.9 | B | 18.1 | B |
| 3 | Avalon Boulevard/213th Street | Signalized | 21.2 | C | 25.3 | C |
| 4 | Avalon Boulevard/Carson Street | Signalized | 45.1 | D | 49.4 | D |
| 5 | Bonita Street/Carson Street | Signalized | 26.3 | C | 20.2 | C |
| 6 | I-405 Southbound Ramps/Carson Street | Signalized | 6.4 | A | 7.2 | A |
| 7 | I-405 Northbound Ramps/Carson Street | Signalized | 17.8 | B | 11.6 | B |

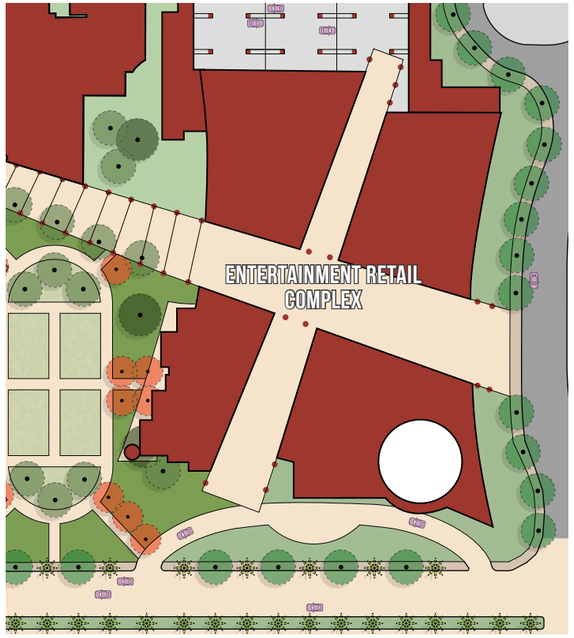
Notes:
s = seconds, LOS = Level of Service.

## 5.7 PROJECT ALTERNATIVE

The project alternative, consisting of an entertainment/retail complex in place of the hotel, was qualitatively assessed based on its potential vehicle trip characteristics in comparison to the preferred alternative. An entertainment complex with retail, restaurant, and sports bar uses will consist of a larger amount of employees than a hotel site, resulting in a larger daily trip generation. The sports bar use has the potential to be regional draw, resulting in longer trip distances. Thus, the overall VMT generated by the project alternative would be higher, therefore the project alternative is anticipated to result in a similar significant and unavoidable CEQA transportation impact.

In terms of peak hour trip generation affecting local mobility (intersections, roadways, freeways), the entertainment complex alternative would only generate minimal a.m. peak hour trips as compared to the preferred alternative with the hotel. Retail, restaurants, and sports bars typically do not operate in the morning hours. However, trip generation in the p.m. peak hour is anticipated to be larger than that of the preferred alternative, potentially resulting in worsened intersection operations (LOS and queue). The Avalon Boulevard/Carson Street intersection would likely be most affected by the traffic generated by the project alternative during the evening peak hour. During busiest times, such as major events drawing large crowds at the sports bars, the intersection could potentially degrade operations to LOS E (compared to LOS D with the preferred alternative).

**Figure 5-16** Entertainment/Retail Complex Alternative




## 5.8 PARKING

### EXISTING PARKING INFRASTRUCTURE

Several of the large surface parking lots within the Civic Center which abut the major corridors are underutilized throughout the weekday, and City staff indicated that these parking lots are underutilized year-round. Parking availability in and near the study area was also a major concern, such as community residents parking at the Civic Center to pick up their children from the local school across Carson Street. Support for more business-friendly parking requirements are desired.

### PARKING IMPROVEMENTS

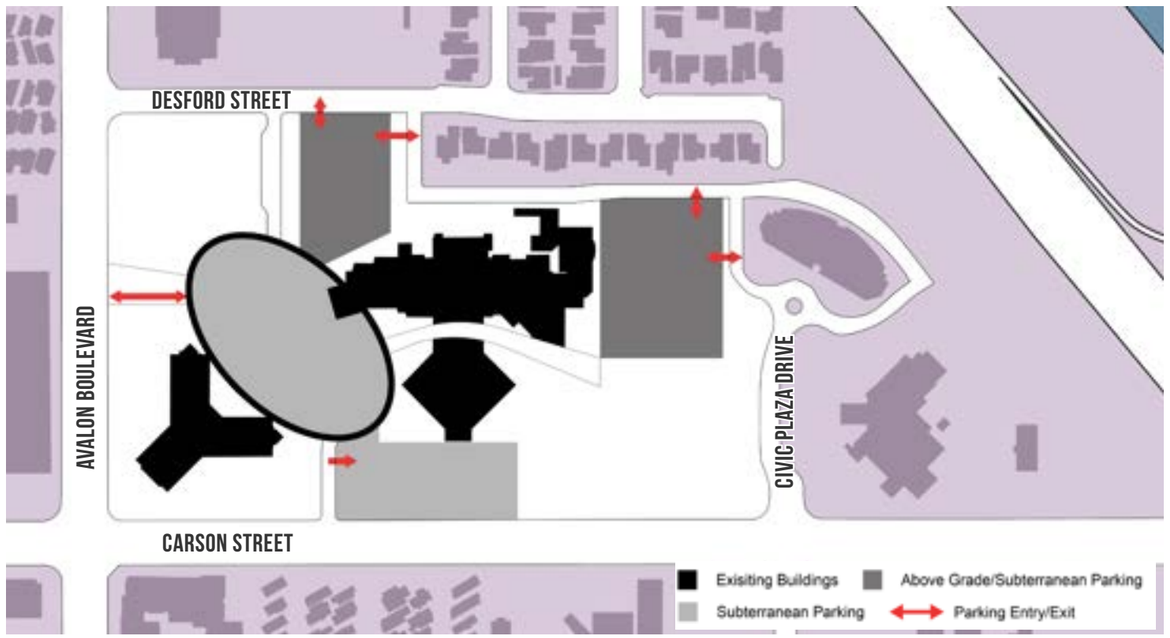
On-street parking capacity may be reduced with roadway reconfiguration that prioritizes other modes of transportation, while off-street parking capacity may be reduced with new development. Thus, this section discusses the potential for shared parking, as well as either reduced or no parking minimums in the vicinity of a major transit stop (consistent with AB 2097).

The parking strategies are developed in support of the project's goal to adopt innovative parking strategies and its associated objectives which include establishing a shared parking structure, among other potential measures.

**Parking management strategies include the following:**

- **Parking Demand Tools**: address the demand for parking and include elements such as travel demand management interventions, promoting alternative modes, establishing intervention thresholds based on parking occupancy, parking compliance, and parking ratios among several other considerations that impact the demand for parking.
- **Location Tools/Considerations**: address who parks where with the premise of spreading the demand over a larger area such as utilizing remote parking facilities, signage strategies, etc.
- **Time Considerations**: that use parking frequency, turnover, and time stays as part of a parking management toolbox.
- **Pricing Tools**: those that consider paid parking programs and demand-based pricing.
- **Supply Considerations**: include maximizing the number of available parking spaces typically by the provision of new parking spaces off-street.
- **Shared Parking Lots**: incentivize development by lowering the cost of providing shared parking structures or lots by identifying and developing a strategy for City acquisition of ideal sites to help align parking supply and transition to more transit-oriented and pedestrian friendly uses.
- **Parking-in-lieu fees**: collect fees as an alternative to the developer/property owner building the parking on site; the fees fund additional public parking to satisfy parking demand and enhance the vitality of businesses.

**Figure 5-17 Parking Strategy**



# 6: INFRASTRUCTURE

The City of Carson is exploring the utilization of the 20 acres of Carson Civic Center site to better serve current and future community needs and expectations through a new Vision Plan.

At the time of this report, the Civic Center site consists of Carson City Hall, Carson Community and Event Center, surface parking lots, and open space areas. The project consists of the development of a new Civic Center Master Plan and a clear action plan through 2030 and beyond. The proposed development programming includes a theme based multi-story luxury resort hotel, an experiential interactive museum, a vibrant mixed-use development, a new performing art center, a modern community/event center, a variety of indoor and outdoor gathering spaces, convention halls, an outdoor theater, and shopping and dining facilities.

This technical report provides a high-level analysis of the broad effects of the Vision Plan on sewer, storm drain, and water infrastructure. The recommendations in this report are based on the estimated capacities of existing facilities and projected infrastructure needs based on the review of available record drawings, service maps, public master plan documents, and a high-level study of the increased demands limited to the study areas.

## 6.1. SEWER INFRASTRUCTURE

### EXISTING SEWER INFRASTRUCTURE

The ownership of the sewer infrastructure in Carson is split between the Los Angeles County Sanitation Districts (LACSD) who maintains the trunk lines, and the Los Angeles County Department of Public Works (LADPW) Consolidated Sewer Maintenance District who owns the rest of the public mains.

The site is adjacent to three sewer pipes, which have been labeled as follows for the purpose of this report. Refer to Attachment A1 for a map of the existing sewer lines serving the site.

- **SS1**: 15-inch LACSD vitrified clay pipe (VCP) trunk line along Avalon Blvd. flowing north and turning west on East 213th St.
- **SS2**: 12-inch LACSD VCP trunk line flowing west along Carson St. and tying into the 15" trunk line mentioned above at the intersection of Carson St. and Avalon Blvd.
- **SS3**: 8-inch LADPW VCP main running along Desford St. to the north, flowing west towards Avalon Blvd, where it joins into the 15" VCP mentioned above.

Both SS2 and SS3 are tributary to SS1. Therefore, any new development tying into SS2 and SS3 will also impact SS1.

Flow monitoring data could not be obtained from LADPW for SS3. LACSD loading factors were used to estimate the proposed flows in SS1 and SS2; thus, LACSD loading factors were also used to estimate the current and proposed sewage flow in SS3 for consistency. Refer to Table 1 for the breakdown of sewer flows assumed to be tributary to SS3.

Per the LA County Land Development Division Sewer Capacity Memo, pipes smaller than 15-inch diameter are considered to be at maximum capacity when they are 50% full.

the review of available record drawings, service maps, public master plan documents, and a high-level study of the increased demands limited to the study areas.

***Table 1. Estimated Existing Sewer Flow in SS3***

| Existing Building | LADPW land use | Sewage generation factor | Quantity | Average Daily Sewer Flow (GPD) |
|---|---|---|---|---|
| Double Tree Hilton Hotel | Hotel | 125 GPD/room | 225 rooms | 28,125 |
| Community & Event Center | Convention Center | 10 GPD/average daily attendance | 2,100 people | 21,000 |
| Panda Logistics | Office Building | 200 GPD/1,000 SF | 155,800 | 31,160 |
| Single Family Homes | Single Family Homes | 260 GPD/house | 54 houses | 14,040 |
| Jack in the Box | Restaurant | 1 GPD/SF | 3,665 SF | 3,665 |
| | | | TOTAL | 97,990 GPD |

LACSD provided flow monitoring data for this report for SS1 and SS2. Refer to Table 2 for the maximum capacity and current flow data that were last recorded on September 14, 2015.

***Table 2. Existing Sewer Pipes Capacities***

| Pipe ID | Ownership | Diameter (in) | Material | Slope (%) | Max capacity (CFS) | Last Measured/Estimated Flow (CFS) | % full |
|---|---|---|---|---|---|---|---|
| SS1 | LACSD | 15 | VCP | 0.10 | 2.2 | 0.92 | 47.0 |
| SS2 | LACSD | 12 | VCP | 0.10 | 1.1 | 0.70 | 57.1 |
| SS3 | LADPW | 8 | VCP | 0.32 | 0.34 | 0.15* | 31.9 |

* As estimated in Table 1 above.

The existing sewer flows for the Carson City Hall and the Community and Event Center were estimated by using the LACSD loading factors and are detailed in Table 3. Refer to Attachment A3 for the LACSD loading factors.

***Table 3. Estimated Existing Sewer Flows from the Project Site***

| Existing Building | LADPW land use | Sewage generation factor | Quantity | Average Daily Sewer Flow (GPD) | Sewer main |
|---|---|---|---|---|---|
| Carson City Hall | Office Building | 200 GPD/1,000 SF | 64,000 SF | 12,800 | SS1 |
| Community & Event Center | Convention Center | 10 GPD/average daily attendance | 2,100 people | 21,000 | SS3 |

### VISION PLAN IMPACTS

The LACSD sewage loading factors were used to estimate the sewer flow that would result from the proposed development. The sewer flows from the existing City Hall and Community Center are assumed to remain the same. Because the renovation of these facilities is not expected to cause an increase in sewer flows, they have been excluded from the analysis below.

Based on the proposed site layout provided by Gruen Associates on June 24, 2025, the new development is assumed to be connected to the existing sewer mains as shown in Table 4. Refer to Attachment A2 for an exhibit showing the proposed sewer connections.

***Table 4. Estimated Proposed Sewer Flows***

| Proposed Building | LADPW land use | Sewage generation factor | Quantity | Sewer Flow (GPD) | Sewer Main |
|---|---|---|---|---|---|
| New City Hall<br>+ retail/restaurant | Office Building<br>Shopping Center | 200 GPD/1,000 SF<br>350 GPD/1,000 SF | 187,000 SF<br>10,000 SF | 37,400<br>3,500 | SS2 |
| Performing Arts Center | Indoor Theatre | 125 GPD/1,000 SF | 124,000 | 15,500 | SS1 |
| Resort Hotel<br>+ retail/restaurant | Hotel<br>Shopping Center | 125 GPD/room<br>350 GPD/1,000 SF | 400 rooms<br>20,000 SF | 50,000<br>7,000 | SS2 |
| Hotel Amenity Deck | Shopping Center | 350 GPD/1,000 SF | 120,000 SF | 42,000 | SS2 |
| Interactive Museum | Shopping Center | 350 GDP/1,000 SF | 25,000 SF | 8,750 | SS2 |
| Mixed-Use Housing | Residential – 5+ units<br>Shopping Center | 156 GPD/unit<br>350 GPD/1,000 SF | 140 units<br>10,000 SF | 3,500<br>21,840 | SS3 |

Based on this analysis, the sewer generation of the site would increase by 189,490 GPD. Refer to Table 5 for the increase of flow in each existing sewer pipe. The percentage full was calculated by using Manning's formula and a roughness coefficient of 0.013 for vitrified clay pipe. The total proposed flow was calculated by adding the estimated flow increase to the existing sewer flows.

***Table 5. Estimated Increased Flows in Surrounding Sewer Mains***

| Pipe ID | Increased flow (CFS) | Total Proposed Flow (CFS) | Proposed % full |
|---|---|---|---|
| SS1 | 0.29 | 1.21 | 55.4 |
| SS2 | 0.23 | 0.93 | 69.2 |
| SS3 | 0.04 | 0.19 | 36.1 |

### SUMMARY AND SUGGESTED IMPROVEMENTS

Based on the analysis described above, the existing sewer system has enough capacity to support the proposed development. Additional gauging data is recommended to confirm the actual capacity of SS3.

Future proposed developments will be reviewed and evaluated by LACSD through the Will Serve Program at the time of plan check.

## 6.2. STORM DRAIN INFRASTRUCTURE

### EXISTING WATERSHED SETTING AND DRAINAGE FACILITIES

The project site lies within the Dominguez Channel Watershed, which is part of the South Santa Monica Bay Watershed in Los Angeles County. The broader watershed drains into the Pacific Ocean and is subject to regional water quality regulations.

Stormwater within the City of Carson is regulated under the jurisdiction of the Los Angeles Regional Water Quality Control Board. The City operates under a Municipal Separate Storm Sewer System (MS4) permit as a medium-sized municipality, which mandates implementation of best management practices (BMPs) to reduce pollutants in stormwater discharges.

The study area includes two significant existing drainage facilities that are both owned and maintained by the Los Angeles County Flood Control District (LACFCD). These facilities represent components of local and regional stormwater conveyance infrastructure, serving to collect and transport stormwater runoff generated within the watershed. Refer to Attachment B3 for a map of the existing storm drain facilities detailed below.

The BI 0540 – U2 Line – South Torrance is a large rectangular reinforced concrete box (RCB) culvert with interior dimensions of 8 feet 10 inches wide by 10 feet 5 inches tall. The large size of this culvert indicates its importance as the major regional storm drain to the Dominguez Channel. Despite the shallow slope of 0.10%, the large cross-sectional area allows the facility to convey an estimated full-flow capacity of approximately 594.5 CFS. This large rectangular reinforced concrete box plays a critical role in reducing flood risk, particularly during large storm events.

The 213th Street Drain is a smaller facility comprised of a 24-inch diameter Reinforced Concrete Pipe (RCP), indicating that it serves more localized drainage needs. With a slope of 0.11%, this pipe can convey an estimated maximum of 7.50 CFS under full-flow conditions. A facility of this size is typically designed to handle a portion of the northwestern runoff.

Refer to Table 6 for a summary of the existing storm drain flows. Manning's equation was used to estimate the full flow capacity.

***Table 6. Existing Storm Drain Flows***

| Pipe ID | Ownership | Dimensions | Material | Slope (%) | Full Flow Capacity (cfs) |
|---|---|---|---|---|---|
| BI 0540 – U2 LINE B – SOUTH TORRANCE | LACFCD | 106" X 125" | RCB | 0.10 | 594.5 |
| 213TH STREET DRAIN | LACFCD | 24" DIA | RCP | 0.11 | 7.5 |

### EXISTING FLOODPLAIN MAPPING

Floodplain delineation is managed by the Federal Emergency Management Agency (FEMA) under the National Flood Insurance Program. FEMA creates Flood Insurance Rate Maps (FIRMs) to determine the location and extent of Special Flood Hazard Areas which designate areas with special flood, mudflow or flood-related erosion hazards.

According to the FIRM in Attachment B4, the Carson Civic Center site lies within Zone X, which designates areas outside of the 500-year floodplain and/or areas protected from the 100-year flood by certified levees, such as the Dominguez Channel levee system. As such, the project site is at minimal risk of flooding.

### HYDROLOGY

The hydrologic effects of the Vision Plan were evaluated by comparing the existing and proposed land cover conditions at the project site. The analysis was conducted using the rational method.

The following methodology and assumptions were used in developing the hydrology analysis:

I. The impervious percentage for both existing and proposed conditions were determined by delineating land cover using Google Maps aerial imagery and the site plan provided for the Revised Vision Plan Alternative (refer to Attachments B1 and B2). The change in the impervious percentage is assessed for the project site only.

II. Areas designated as green roofs in the proposed site plan were categorized as pervious due to their ability to slow down runoff.

III. Runoff coefficients used in the rational method were sourced from the State Water Resources Control Board's Runoff Coefficient Fact Sheet:

a) Impervious areas: C = 0.9

b) Pervious areas: C = 0.1

The Vision Plan will result in moderate changes to the site's impervious and pervious surfaces. A comparison between existing and proposed land use is summarized in Table 7.

***Table 7. Land Cover of Existing and Proposed Site***

| Land cover | Existing Conditions | Proposed Conditions |
|---|---|---|
| Roofs/Balcony (AC) | 3.0 | 7.0 |
| Concrete Pavement (AC) | 4.1 | 4.7 |
| Asphalt/Misc. (AC) | 7.2 | 1.1 |
| Landscape/Trees/Grass (AC) | 5.7 | 7.1 |
| **Percent Impervious (%)** | **71.5** | **64.4** |
| **Percent Pervious (%)** | **28.5** | **35.6** |

Although the footprint of impervious surfaces is being redistributed with increased rooftop coverage and reduced asphalt, the overall impervious area will decrease, which positively influences runoff rate and water quality. The estimated pervious cover in the existing and proposed conditions is shown in Attachments B1 and B2, respectively.

The estimated runoff generated from the project was calculated using the rational method. The precipitation intensity of 0.247 inches per hour was gathered from the National Weather Service (refer to Attachment B6). As shown in Table 8, the calculated runoff from a 50-year, 24-hour storm is expected to decrease with the implementation of the Vision Plan. The proposed increase in pervious cover would lower the runoff coefficient, resulting in a decreased runoff compared to existing conditions.

### WATER QUALITY

The City of Carson regulates stormwater discharge through the National Pollutant Discharge Elimination System (NPDES) permit program, which is authorized by the federal Clean Water Act. The Vision plan project will be required to comply with NPDES requirements during both the construction and post-construction phases. Compliance is achieved through coverage under the Construction General Permit (CGP) and the Municipal Separate Storm Sewer System (MS4) Permit, respectively.

Prior to the commencement of any construction activities, projects that will disturb one acre or more of land are required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the CGP. The SWPPP outlines the use of construction Best Management Practices (BMPs) that are designated to minimize the discharge of pollutants from the site.

Construction activities such as clearing, excavation, grading, and construction have the potential to impact hydrology and water quality.

$$Q = CiA$$

***Table 8. Rational Method for Calculating Runoff***

| | Existing | Proposed |
|---|---|---|
| Σ C (UNITLESS) | 0.67 | 0.61 |
| i (IN/HR) | 0.247 | 0.247 |
| A (AC) | 20 | 20 |
| **Q (50-YEAR, 24-HR) (CFS)** | **3.32** | **3.03** |

These impacts include:

- Erosion of exposed soils or disturbed soils
- Sediment deposits entering nearby storm drains or water bodies
- Increased pollutant loading from construction equipment and materials

While natural erosion occurs from rainfall and wind, disturbed soils during construction are more vulnerable to accelerated erosion rates, potentially resulting in downstream sedimentation and water quality degradation. To mitigate these effects, construction-phase BMPs, such as silt fences, stabilized entrances, and sediment traps, should be implemented. Post-construction BMPs should also be incorporated to manage long-term site runoff and improve water quality. The selection and implementation of BMPs should be consistent with the California Stormwater Quality Association (CASQA) BMP Handbook and the City of Carson's stormwater requirements.

Post-construction stormwater quality is addressed through the implementation of Low Impact Development (LID) standards. LID strategies are recommended to improve water quality and drainage to meet storm water quality standards from the City of Carson NPDES MS4 permit. LID strategies are designed to mimic natural hydrologic conditions by capturing, infiltrating, and/or treating stormwater runoff onsite to reduce pollutant loads and runoff volume. Complying with LID standards for stormwater quality is required for developments and redevelopments over a certain threshold as defined by the 2013 Los Angeles County LID Ordinance2, which improvements under the Vision Plan are expected to exceed. LID strategies for the Vision Plan will be evaluated by the local entities through the plan check process.

### SUMMARY AND SUGGESTED IMPROVEMENTS

Based on the analysis above, the proposed increase in pervious cover under the Vision Plan is expected to cause a decrease in stormwater runoff. Therefore, downstream adverse impacts at each storm drain lines are not anticipated.

## 6.3. WATER INFRASTRUCTURE

### WATER SUPPLY

The Project lies within the California Water Service (Cal Water) Dominguez District service area. According to the 2020 Urban Water Management Plan for the Dominguez District (the "UWMP"), the water supply originates from a combination of the following sources:

- Groundwater pumped from the West Coast Subbasin and the Central Subbasin
- Imported water purchased from Metropolitan Water District of Southern California (MWD), sourced from the Colorado River and the State Water Project in northern California
- Treated desalted water produced in the C. Marvin Brewer Desalter
- Recycled wastewater produced by the West Basin MWD

Table 9 shows the water supply sources and volumes for the year 2020 and projected volumes anticipated for the year 2045, as published in the UWMP. Volume is expressed in Acre-Feet (AF). Despite an anticipated 7.7% increase in population, the water demand is expected to decrease. This reduction in water demand is mostly due to the implementation of water use reduction programs and the rise of water-efficient plumbing fixtures.

***Table 9. 2020 Water Supply***

| Water Supply Source | 2020 Volume (AF) | 2045 Volume (AF) |
|---|---|---|
| Purchased/Imported | 23,673 | 22,140 |
| Groundwater | 4,271 | 5,622 |
| Desalinated water | 438 | 438 |
| Recycled water | 4,587 | 4,737 |
| Total: | 32,968 | 32,937 |

Based on this analysis, the Domiguez district's water supplies are sufficient to support the proposed development of Carson City Hall.

### EXISTING WATER DISTRIBUTION AND SIZING CRITERIA

Under the existing conditions, the site is served by a variety of water lines ranging from 6 inches to 10 inches in diameter. The pipes serving the site have been labeled W1 through W7 as shown in Attachment C1.

While the capacity of water distribution pipes depends on the available pressure in the system, the minimum size of the pipes was estimated using the Los Angeles Department of Water and Power (LADWP) sizing criteria shown in Table 10, for both domestic water (DW) and fire water (FW) pipes.

***Table 10. Sizing Criteria for Water Pipes***

| Pipe size | DW max. flow (GPM) | FW max. flow (GPM) |
|---|---|---|
| 4" | 400 | 600 |
| 6" | 700 | 1,400 |
| 8" | 1,500 | 2,500 |
| 10" | 2,500 | 5,000 |

### DOMESTIC WATER

The future water demand was estimated by using the projected sewer generation with a 1:1 conversion factor. Refer to Table 4 for how the estimated flows were calculated.

Similarly to the sewer capacity analysis, the renovation of the existing City Hall and Community Center is not expected to cause a change in water demand and was excluded from the analysis below. Based on the land uses proposed in the Vision Plan, the future water demand is estimated to increase by 189,190 GPD. Table 11 shows where the increase is expected to occur. Flows were converted to gallons per minute (GPM) to compare with the sizing criteria described in the section above.

***Table 11. Estimated Increase in Water Demand in Each Pipe***

| Proposed Land Use | Estimated Water Demand (GPD) | Estimated Water Demand (GPM) | Nearest Ex. Distribution Main | Anticipated Max. DW Flow* (GPM) |
|---|---|---|---|---|
| New City Hall + retail/restaurant | 40,900 | 28.4 | W6 (8") | 1,500 |
| Performing Arts Center | 15,500 | 10.8 | W2 (8") | 1,500 |
| Resort Hotel + retail/restaurant | 57,000 | 39.6 | W4 (10") | 2,500 |
| Hotel Amenity Deck | 42,000 | 29.2 | W4 (10") | 2,500 |
| Interactive Museum | 8,750 | 6.1 | W5 (6") | 700 |
| Mixed-Use Housing | 25,340 | 17.6 | W1 (6") | 700 |

** Based on Table 10 above.*

Based on Table 11, all surrounding water distribution mains are anticipated to have the capacity to accommodate the increased domestic water demand.

### FIRE WATER

In accordance with the Section B105 of Appendix B of the California Fire Code, the fire flow requirements for the proposed development are shown in Table 12. Construction type IIIA was assumed in order to provide a conservative analysis. Existing buildings that are proposed to remain were assumed to have appropriate fire water protection and were excluded from this analysis.

### SUMMARY AND SUGGESTED IMPROVEMENTS

Based on the analysis above, a portion of the distribution main W1 may require an upsize from a 6-inch to an 8-inch minimum to support the increased fire flow requirement generated by the mixed-use housing development. Refer to Attachment C2 for a map of the proposed water connections and suggested improvements. Fire flow requirements may be reduced if the actual construction type is classified as type IA or IB.

The analysis is dependent on the current water pressure in the existing water distribution system and is expected to be verified during the design process of the proposed improvements.

As discussed in section 4.1, the water supply is expected to be sufficient to support the future development and growth of the Dominguez district.

***Table 12. Estimated Fire Flow Requirements and Proposed Main Connections***

| Proposed New Development | Square footage | Min. Fire Flow (GPM) | Nearest Existing Distribution Main | Anticipated Max. FW Flow** (GPM) |
|---|---|---|---|---|
| New City Hall | 197,000 | 1,500 | W6 (8") | 2,500 |
| Performing Arts Center | 124,000 | 1,250 | W2 (8") | 2,500 |
| Resort Hotel* | 380,000 | 1,500 | W4 (10") | 5,000 |
| Hotel Amenity Deck | 120,000 | 1,250 | W4 (10") | 5,000 |
| Interactive Museum | 25,000 | 1,000 | W5 (6") | 1,400 |
| Mixed-Use Housing* | 440,000 | 1,500 | W1 (6") | 1,400 |
| Subterranean Parking | 251,000 | 1,500 | W3 (12") | >5,000 |

* Type R occupancy.
** Based on Table 10.

### REFERENCES

California Water Service, 2020 Urban Water Management Plan – Dominguez District, June 2021.

LADWP, "Application for Water Pressure – Flow Report", July 2023. www.ladwp.com/sites/default/files/2023-09/SAR%20Application%20Form%20%2007-01-2023%20v1_0.pdf.

## 6.4. PROJECT ALTERNATIVE - SEWER INFRASTRUCTURE

Based on the proposed site layout provided by Gruen Associates on June 24, 2025, the new development is assumed to be connected to the existing sewer mains as shown in Table 4. Refer to Attachment A2 for an exhibit showing the proposed sewer connections.

***Table 6. Estimated Proposed Sewer Flows – Alternate Programming***

| Proposed Building | LADPW land use | Sewage generation factor | Quantity | Sewer Flow (GPD) | Sewer Main |
|---|---|---|---|---|---|
| **New City Hall + retail/restaurant** | Office Building<br>Shopping Center | 200 GPD/1,000 SF<br>350 GPD/1,000 SF | 187,000 SF<br>10,000 SF | 37,400<br>3,500 | SS2 |
| **Performing Arts Center** | Indoor Theatre | 125 GPD/1,000 SF | 124,000 | 15,500 | SS1 |
| **Resort Hotel + retail/restaurant** | Hotel<br>Shopping Center | 125 GPD/room<br>350 GPD/1,000 SF | 400 rooms<br>20,000 SF | 50,000<br>7,000 | SS2 |
| **Entertainment/Retail Complex** | Shopping Center<br>Restaurant | 350 GPD/1,000 SF<br>1 GPD/SF | 130,000 SF<br>80,000 SF | 45,500<br>80,000 | SS2 |
| **Interactive Museum** | Shopping Center | 350 GDP/1,000 SF | 30,000 SF | 10,500 | SS2 |
| **Mixed-Use Housing** | Residential – 5+ units<br>Shopping Center | 156 GPD/unit<br>350 GPD/1,000 SF | 140 units<br>10,000 SF | 3,500<br>21,840 | SS3 |

Based on this analysis, the sewer generation of the site would increase by 217,740 GPD under the alternate plan. Refer to Table  for the increase of flow in each existing sewer pipe. The percentage full was calculated by using Manning's formula and a roughness coefficient of 0.013 for vitrified clay pipe. The total proposed flow was calculated by adding the estimated flow increase to the existing sewer flows.

***Table 7. Estimated Increased Flows in Surrounding Sewer Mains – Alternate Programming***

| Pipe ID | Increased flow (CFS) | Total Proposed Flow (CFS) | Proposed % full |
|---|---|---|---|
| **SS1** | 0.34 | 1.26 | 56.8 |
| **SS2** | 0.27 | 0.97 | 71.5 |
| **SS3** | 0.04 | 0.19 | 36.1 |

## 6.5. PROJECT ALTERNATIVE - WATER INFRASTRUCTURE

4.2.2.2.1 Domestic Water

The future water demand was estimated by using the projected sewer generation with a 1:1 conversion factor. Refer to Table 4 for how the estimated flows were calculated.

Similarly to the sewer capacity analysis, the renovation of the existing City Hall and Community Center is not expected to cause a change in water demand and was excluded from the analysis below. Based on the land uses proposed in the Vision Plan, the future water demand is estimated to increase by 217,740 GPD. Table  shows where the increase is expected to occur. Flows were converted to gallons per minute (GPM) to compare with the sizing criteria described in the section above.

***Table 85. Estimated Increase in Water Demand in Each Pipe – Alternate Programming***

| Proposed Land Use | Estimated Water Demand (GPD) | Estimated Water Demand (GPM) | Nearest Ex. Distribution Main | Anticipated Max. DW Flow* (GPM) |
|---|---|---|---|---|
| **New City Hall + retail/restaurant** | 40,900 | 28.4 | W6 (8") | 1,500 |
| **Performing Arts Center** | 15,500 | 10.8 | W2 (8") | 1,500 |
| **Entertainment/Retail Complex** | 125,500 | 87.2 | W4 (10") | 2,500 |
| **Interactive Museum** | 10,500 | 7.3 | W5 (6") | 700 |
| **Mixed-Use Housing** | 25,340 | 17.6 | W1 (6") | 700 |

** Based on Table 12.*

Based on Table , all surrounding water distribution mains are anticipated to have the capacity to accommodate the increased domestic water demand.

4.2.2.2.2 Fire Water

In accordance with the Section B105 of Appendix B of the California Fire Code, the fire flow requirements for the proposed development are shown in Table 14. Construction type IIIA was assumed in order to provide a conservative analysis. Existing buildings that are proposed to remain were assumed to have appropriate fire water protection and were excluded from this analysis.

***Table 96. Estimated Fire Flow Requirements and Proposed Main Connections – Alternate Programming***

| Proposed New Development | Square footage | Min. Fire Flow (GPM) | Nearest Existing Distribution Main | Anticipated Max. FW Flow** (GPM) |
|---|---|---|---|---|
| **New City Hall** | 197,000 | 1,500 | W6 (8") | 2,500 |
| **Performing Arts Center** | 124,000 | 1,250 | W2 (8") | 2,500 |
| **Resort Hotel*** | 380,000 | 1,500 | W4 (10") | 5,000 |
| **Entertainment/Retail Complex** | 210,000 | 1,500 | W4 (10") | 5,000 |
| **Interactive Museum** | 30,000 | 1,000 | W5 (6") | 1,400 |
| **Mixed-Use Housing*** | 440,000 | 1,500 | W1 (6") | 1,400 |
| **Subterranean Parking** | 251,000 | 1,500 | W3 (12") | >5,000 |

* Type R occupancy.
** Based on Table 12.

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# 7: ECONOMICS

Prior to this Carson Civic Center Specific Plan effort, Gruen Associates prepared a Vision Plan for the Carson Civic Center that explored the future utilization of 20 acres of the Civic Center to not only better serve the needs of the community but also to be a source of inspiration and pride for local residents. This Carson Civic Center Specific Plan translates the inspirations articulated in the Vision Plan into policy guidelines to be implemented over the next decade or two.

Land Econ Group (LEG), the real estate economist on the Z&K and Gruen team, was tasked to examine the market feasibility of the high-rise hotel and multi-family residential components suggested in the Vision Plan. Our research, analysis and conclusions are summarized in this section.

# 7 ECONOMICS

## 7.1. EXECUTIVE SUMMARY

### HOTEL MARKET CONCLUSIONS

Given the current supply and demand outlook and a review of comparable hotels, our recommendation for hotel development on the Civic Center campus is for a three-to-four star property in the 240 to 300 room range, or slightly larger than the Double Tree, with 8,000 to 10,000 square feet of conference and/or event space. This recommendation is predicated on the Specific Plan's ability to create a destination for this civic center location. Visibility from Carson Street and the I-405 will be important. The target market segment is expected to be business people visiting employment centers in the South Bay, including the Ports of Los Angeles and Long Beach, fans attending games at SoFi Stadium in Inglewood, competitors and sports teams and their entourage visiting Dignity Health Sports Park and out of town visitors to the revamped Carson Event Center and to CSU Dominguez Hills.

### MULTI-FAMILY MARKET CONCLUSIONS

Land Econ's multi-family market forecast is that the City of Carson will absorb between 1,400 and 2,100 multi-family units over the next two decades, although approximately 1,600 new units have been approved. Assuming that the renovated Civic Center campus will provide attractive amenities for residential development, the approximately 140 units suggested in the Vision Plan should be pursued. Assuming excellence in the design and construction of this campus, a condominium project is likely marketable at this location either as urban townhomes or as stacked flats over the parking structure. However, a condominium development will require fee simple land disposition to the developer and subsequently to the homeowners. Condominium development on leased City property is not recommended as the units would not be salable. If the Civic Center Property is available to developers only on a lease basis, then the market potential is for rental apartments.

### HOTEL IMPLEMENTATION AND FINANCIAL IMPACT

The financial feasibility of the high-rise hotel was tested on a preliminary basis without the benefits of architectural design or cost consultant support. The conclusions from the feasibility testing are that private development of such a hotel will require financial support from the City of Carson, and that support can come in several forms:

- A favorable land lease to the hotel developer. The current land value for the Civic Center site with Carson Street frontage is in the vicinity of $100 per square foot, and a favorable land lease could be an annual payment of five percent of appraised land value with CPI adjustments every five years.
- Our pro forma also suggest this hotel is not able to support the construction of its own parking structure. We suggest a publicly funded parking structure that allows the hotel to reserve a number of spaces for its guests. The City and hotel could share the parking revenue on an equitable basis.
- If the conference or event space can be designed as a separate portion of the hotel, the use of public financing may also be a strategy although the savings to the hotel developer may not be major.

While some City incentives are likely required for this hotel to materialize in the near term, this hotel provides a number of important economic development benefits to Carson:

- Once this hotel reaches stabilized operation, it is expected to generate $1.5 million or more per year in transient occupancy tax revenue and an additional half million in land lease revenue for a total of approximately $2.0 million annually. This number will increase over time with inflation. As a point of comparison, the City's total transient occupancy tax receipts for fiscal year 2023/24 was only $2.4 million.
- Using a five percent bond rate, this $2.4 million per year will support approximately $48 million in new Civic Plaza and public parking garage construction.
- The two hotels combined, the DoubleTree and this new hotel, will make Carson Civic Center a significantly stronger hotel destination in the South Bay market.
- The hotel guests from these two properties will increase the demand for restaurants, bars and coffee shops locally which will contribute to satisfying the City's objective of creating a new pedestrian oriented Civic Center campus and downtown district.

## 7.2. DEMOGRAPHICS AND ECONOMICS

### OVERVIEW

Located in the South Bay portion of Los Angeles County, Carson was largely rural until the conclusion of World War II. The post-war economic boom in Los Angeles, fueled by the aerospace industry and ocean-going commerce at the Ports of Los Angeles and Long Beach, drove residential development in Carson. Freeway construction linking Carson not only to the ports but also to Downtown Los Angeles, Los Angeles International Airport and Long Beach Airport, accelerated not only residential but also commercial and industrial development during the 1970s and 1980s. Today the Carson economy is highly diversified and the largest employers include California State University Dominguez Hills (CSUDH), Carson Health Center, Watson Land Company, Toyota Motor Sales USA and Dignity Health Sports park.

When compared to its neighboring cities, such as Gardena, Compton, Torrance and Long Beach, Carson's demographics stands out in several ways (Table 1). According to mid 2023 Census Bureau estimates, Carson had by a large margin the highest owner-occupied housing percentage of the five cities at 74 percent. Its median household income at $107,400 was second only to Torrance at $113,100. It had the second lowest median home value but the second highest median rent, suggesting a need for more rental housing; and many units have been completed in recent years. Carson also had the second highest retail sales per capita at $30,847 trailing only Torrance's $41,383 which contains the large Del Amo Mall and numerous high-end automobile dealerships.

***Table 1: Comparison of Demographic Characteristics of Carson and Neighboring Cities***

| | Carson | Gardena | Comption | Torrance | Long Beach |
|---|---|---|---|---|---|
| Population Estimate 7.1.2023 | 91,139 | 58,377 | 90,986 | 139,224 | 449,468 |
| Percentage Hispanic | 38.9% | 43.9% | 71.2% | 19.3% | 43.4% |
| Percent Asian | 26.9% | 24.9% | 1.2% | 38.7% | 12.8% |
| Percent Black | 22.5% | 18.9% | 25.3% | 3.5% | 11.9% |
| Households | 26,406 | 20,893 | 24,227 | 55,317 | 171,309 |
| Persons per Household | 3.48 | 2.82 | 3.84 | 2.56 | 2.61 |
| Owner Occupied Rate | 74.0% | 48.9% | 57.4% | 54.6% | 40.9% |
| Median Household Income | $107,391 | $79,291 | $74,270 | $113,105 | $83,969 |
| Median Home Value 2018-2022 | $645,600 | $667,600 | $546,700 | $1,036,600 | $762,200 |
| Median Rent | $1,914 | $1,761 | $1,601 | $2,214 | $1,803 |
| Retail Sales per Capita in 2017 | $30,847 | $20,453 | $11,031 | $41,383 | $10,749 |

Source: US Census Bureau, American Community Survey and California State Department of Finance

## 7.3. THE HOTEL MARKET

From a global perspective, some hotel executives, like Marriott International President and CEO Tony Capuano, were bullish on the market going forward. "Pre-pandemic, you saw a younger demographic really start to shift their spending away from hard goods toward travel and experiences," he said. "Now when we look at the data, it is clear that the pandemic acted as an accelerant to that trend across demographics." Some thought the revenge travel phenomenon would be short lived, but it's still going, he said. There seems to have been a fundamental psychographic change that should support the hotel industry for decades to come.1 That perspective was conveyed prior to the recent economic uncertainty created by the fluctuating Federal policy on trade and tariffs. Should the US tariff policies eventually settle to approximately the levels before the recent disruptions, as some economists expect, long term travel and hotel demand remains positive.

While the longer-term global trend may be favorable for travel and hotel demand, hotel development in Carson must compete in the South Bay subregion of Los Angeles County. Carson is bisected by I-405 and framed by I-110 on the west, I-710 on the east, SR 91 on the north and SR 1 (Pacific Coast Highway) on the south. This highway network makes Carson a convenient location for regional access to many major employment centers and transportation hubs include the Port of Los Angeles, Port of Long Beach, Long Beach Airport and Los Angeles International Airport. In addition to outstanding regional access, Carson has some local visitor activity generators:

- California State University Dominguez Hills (CSUDH) – A Cal State campus with approximately 18,000 students will generate hotel demand from family and friends visiting students, visiting sports team and faculty visiting for academic purposes.
- Dignity Health Sports Park (DHSP) – This sports park includes a soccer stadium, a track and field facility, a tennis complex and a velodrome. This major regional sports facility will generate visitation from competitors and their entourage, opposing team visiting for games or meets and fans traveling some distance to attend events.
- Carson Event Center – Owned by the City, this center has mostly hosted events for the local community. However, with renovation, rebranding and a change in mission, it will host more events that attract from a wider geography resulting in some hotel room-night generation.
- Porsche Experience – This facilitate is owned by Porsche of North America and is designed to enhance brand loyalty. It includes a road course, an off-road course, some skid pads and a speedway plus some food and beverage venues and a gift shop. While it does not generate a large number of visitors, many come from long distance and will need hotel accommodations.
- Long Beach Airport (LGB) – Located only 20 minutes and eight miles from the Carson Civic Center, the Long Beach Airport is a potential room-night generator for the Civic Center hotels. In March of 2024 this airport registered 182,400 passenger departure which was an all-time record.

### HOTEL INVENTORY AND LACK OF NEW COMPETITION

A major new upscale hotel located at the Carson Civic Center would not only compete with other hotels in Carson but also with upscale hotels in nearby cities. Within a three-mile radius of Carson Civic Plaza, there are 15 hotels with a total room count of 1,697 rooms[2]. One-third of these rooms are in economy properties (Table 2 see next page). Of these 15 properties, only one was built after 2000, and it is the Miyako Hybrid Hotel built in 2009 which caters to an Asian clientele and is in the market area because of the major Toyota facility in Carson and a Honda facility in Torrance. Its restaurants only serve Japanese food, and its television programs target guests from Asia. While a number of the economy properties have been renovated within the past five years, there has not been a new upscale hotel built in this market since the Miyako. In addition to the Miyako, there is only the Double Tree by Hilton located at Two Civic Plaza that is rated as an upscale hotel[3].

A review of the longer-term performance of hotels in this market indicate that the pandemic of 2020 and 2021 had an adverse impact on the less than competitive smaller and older inventory. Since January of 2019, the number of hotel properties has dropped from 19 to 16 and the number of rooms has declined from nearly 1,897 to 1,559. The revenue for this group of hotels has yet to fully recover from the pandemic and the average occupancy over the 12-month ending in January 2025 is at 65.5 percent down from a peak of 76.2 percent during the period ending in January 2017 (Table 3). In contrast to the performance of this market area that includes portions of Torrance, Gardena and Harbor City, the transient occupancy tax collected by the City of Carson for Carson hotels indicates full recovery from the high level reached before the Covid pandemic (Table 4). The tax revenue increase was 16.2 percent from FY 2022/23 to FY 2023/24. However, the recent monthly tax receipts data indicate declining room revenue, which was particularly noticeable in December of 2024 (Table 5 see next page).

Even though the climate in Southern California is mild year-round, there is seasonality to seasonality to hotel demand in Carson (Figure 1 see next page). During the past 12 months, the highest occupancy was achieved from July through September in 2024. For nine out of the past twelve months, the occupancy rate has been over 70 percent and for six out of those months the occupancy rate has been over 75 percent.

The examination of the local hotel inventory and the limited recent revenue growth indicate a mismatch between supply and demand. In the recent pandemic recovery years, South Bay hotel demand appears to be much stronger for the newer and higher quality properties. By expanding the areas of analysis to a five-mile radius from Carson Civic Plaza and only considering properties of at least 25 rooms, we were able to detect a strong market preference for higher quality properties. As shown, over the past two years the upper and upper midscale hotels enjoyed an occupancy rate that hovered around 80 percent while the midscale and economy hotels were only able to achieve occupancy rates of 65 to 67 percent (Figure 2 see next page). This data strongly suggests that the opportunity for new hotel development at Carson Civic Center is for a higher quality hotel rather than a standard select service hotel.

After two years of strong market recovery from the pandemic, the South Bay hotel market growth appears to have paused, possibly due to the uncertainties created by the recent volatile Federal government policies. However, in the near- and medium-term future, several local events and policy changes will drive Carson's hotel demand forward:

- In 2026 the Soccer World Cup will play a number games in the Los Angeles basin with SoFi Stadium in Inglewood being a key venue. These games will bring thousands of international visitors into Southern California to spend millions of dollars in local hotels and restaurants.
- In 2027 the National Football League championship Super Bowl game will also be played in SoFi Stadium in Inglewood. This event typically brings many millions of dollars of visitor spending into the local economy.
- In 2028 Los Angeles will host the Summer Olympic Games, and this two plus week event will have a greater impact than either the World Cup or the Super Bowl due to the variety of events, length of the games and its international appeal.
- The Carson Event Center, owned by the City, has to date primarily hosted local community events. Recent policy changes will lead to the renovation and rebranding of the facility to target more business and institutional events that will draw from a larger geography. When complemented by meeting space in both the Double Tree and this new high-rise hotel, the Civic Center complex will become a stronger destination for conference attendees and hotel guests.

### NEW HOTEL DEVELOPMENT IN CARSON

According to information provided by the City, there is only one new hotel in the development pipeline. A 111-room hotel has been approved for 888 E. Dominguez Street resulting from a lot split on the parcel of the current Motel 6. Given its location, if built this hotel would likely be another economy grade property and not a direct competitor to the high-rise hotel envisioned in the Vision Plan.

### PROGRAM RECOMMENDATIONS AND FEASIBILITY TESTING

Considering the scarcity of appropriate comparison hotel in the local market, we expanded the research to a radius of 5.5 miles and identified six hotel that are comparables to the potential subject hotel in the Civic Center (Table 6). In addition to the DoubleTree, the other five were all in the city of Torrance. On average each of these six hotels occupied 3.8 acres of land, had 230 rooms, contained 6,300 square feet of meeting space and had 196 parking stalls for a ratio of 0.85 stall per guest room.

*Table 2: Current Inventory of Hotels within Three Miles of Carson Civic Plaza*

| Count | Name | Address | City | CoStar Class | Year Opened Renovated | Rooms | Meeting Space in SF | Parking Stalls | Parking Ratio |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Hampton by Hilton Inn | 767 E Albertson St | Carson | Upper Midscal | 1989 | 136 | - | NA | |
| 2 | Motel 6 Gardena | 111 W Albertson St | Gardena | Economy | 1987/2017 | 60 | - | 54 | 0.90 |
| 3 | Plaza Hotel Torrance | 1720 Cabrillo Ave | Torrance | Economy | 1923/2001 | 36 | - | 13 | 0.36 |
| 4 | Rodeway Inn | 1325 Carson St | Carson | Economy | 1984 | 31 | - | 23 | 0.74 |
| 5 | Cali Inn | 415 W Carson St | Carson | Midscale | 1991 | 35 | - | NA | |
| 6 | **DoubleTree by Hilton** | **2 Civic Plaza** | **Carson** | **Upscale** | **1988** | **225** | **8,750** | **212** | 0.94 |
| 7 | Motel 6 Carson | 888 E Dominguez St | Carson | Economy | 1974/2023 | 95 | 500 | 61 | 0.64 |
| 8 | Extended Stay America | Harborgate Way | Torrance | Midscale | 1999 | 122 | - | 165 | 1.35 |
| 9 | Travelodge Inn & Suites | 18606 S Normandie A | Gardena | Economy | 1989 | 40 | - | 40 | 1.00 |
| 10 | Motel 6 Harbor City | 820 Sepulveda Blvd | Harbor City | Economy | 1978/2022 | 57 | - | 57 | 1.00 |
| 11 | Extended Stay America LA Sou | 18602 S Vermont Ave | Gardena | Economy | 1998/2022 | 136 | - | 125 | 0.92 |
| 12 | Holiday Inn Torrance | 19800 S Vermont Ave | Torrance | Upper Midscal | 1986 | 339 | 6,423 | 397 | 1.17 |
| 13 | Redac Gateway Hotel | 20801 S Western Ave | Torrance | Economy | 1985 | 102 | 500 | 116 | 1.14 |
| 14 | **Miyako Hybrid Hotel** | **21381 S Western Ave** | **Torrance** | **Upscale** | **2009** | **208** | **2,410** | **280** | 1.35 |
| 15 | Motel 6 Carson | 888 E Dominguez St | Carson | Economy | 1974/2023 | 75 | - | 203 | 2.71 |
| | **Total Existing** | | | | | **1,697** | | **1,746** | **1.09** |
| | **Total Economy** | | | | | **557** | | | |

Source: CoStar

*Table 3: Long Term Hotel Market Data within Three Miles of Civic Plaza*

| Period | Inventory Rooms | Existing Buildings | Per Building | 12 Mo Revenue | 12 Mo ADR | 12 Mo RevPAR | Occupancy | Market Sale Price/Room | Market Cap Rate |
|---|---|---|---|---|---|---|---|---|---|
| Jan 2025 | 1,559 | 16 | 97 | $61,148,357 | $142.14 | $103.92 | 65.5% | $177,777.00 | 8.2% |
| Jan 2024 | 1,666 | 17 | 98 | $64,086,003 | $141.77 | $105.06 | 65.8% | $154,597.00 | 8.2% |
| Jan 2023 | 1,740 | 17 | 102 | $64,167,636 | $135.27 | $99.44 | 66.3% | $141,081.00 | 7.9% |
| Jan 2022 | 1,801 | 17 | 106 | $54,351,411 | $117.93 | $82.69 | 62.8% | $138,381.00 | 7.6% |
| Jan 2021 | 1,800 | 17 | 106 | $39,651,448 | $100.45 | $57.80 | 55.0% | $147,950.00 | 7.8% |
| Jan 2020 | 1,896 | 19 | 100 | $66,245,492 | $120.17 | $95.72 | 73.7% | $163,567.00 | 7.9% |
| Jan 2019 | 1,897 | 19 | 100 | $65,657,737 | $119.71 | $84.84 | 72.5% | $167,083.00 | 7.6% |
| Jan 2018 | 1,893 | 19 | 100 | $66,900,312 | $119.39 | $96.80 | 73.8% | $156,419.00 | 7.7% |
| Jan 2017 | 1,893 | 19 | 100 | $66,417,279 | $117.20 | $96.10 | 76.2% | $137,771.00 | 8.0% |
| Jan 2016 | 1,894 | 19 | 100 | $61,204,940 | $108.94 | $88.85 | 73.5% | $121,047.00 | 8.2% |
| Jan 2015 | 1,883 | 19 | 99 | $53,817,297 | $99.73 | $78.30 | 70.9% | $107,387.00 | 8.3% |
| Jan 2014 | 1,877 | 19 | 99 | $48,998,804 | $94.30 | $71.53 | 70.2% | $101,867.00 | 8.4% |
| Jan 2013 | 1,876 | 19 | 99 | $45,165,565 | $90.17 | $65.99 | 70.0% | $90,747.00 | 8.5% |
| Jan 2012 | 1,874 | 19 | 99 | $41,270,362 | $85.33 | $60.37 | 65.0% | $82,600.00 | 8.6% |
| Jan 2011 | 1,872 | 19 | 99 | $36,958,855 | $81.39 | $54.09 | 63.6% | $77,350.00 | 8.8% |
| Jan 2010 | 1,872 | 19 | 99 | $30,362,660 | $81.25 | $48.95 | 56.9% | $66,204.00 | 9.3% |

Source: Co

*Table 4: Transient Occupancy Tax and Room Revenue within Carson*
*(Thousands of Dollars)*

| Year | Tax Collection TOT Rate = 9% | Room Revenue | Annual Percentage Change |
|---|---|---|---|
| FY 2023/24 | $2,413 | $26,810 | 16.2% |
| FY 2022/23 | $2,077 | $23,079 | 2.5% |
| FY 2021/22 | $2,026 | $22,515 | 23.0% |
| FY 2020/21 | $1,647 | $18,301 | -7.8% |
| FY 2019/20 | $1,787 | $19,850 | -20.4% |
| FY 2018/19 | $2,246 | $24,951 | 0.2% |
| FY 2017/18 | $2,242 | $24,913 | 0.8% |
| FY 2016/17 | $2,225 | $24,727 | 4.1% |
| FY 2015/16 | $2,138 | $23,760 | 15.6% |
| FY 2014/15 | $1,850 | $20,560 | NA |

Source: City of Carson - 9% TOT Rate

*Table 5: Recent Monthly Transient Occupancy Trend (Dollars in Thousands)*

| | FY 2022-23 | FY 2023-24 | Change | FY 2024-25 | Change |
|---|---|---|---|---|---|
| July | $172.4 | $218.1 | 26.5% | $218.6 | 0.2% |
| August | $165.2 | $217.4 | 31.6% | $205.2 | -5.6% |
| September | $153.0 | $199.7 | 30.5% | $179.3 | -10.2% |
| October | $182.0 | $217.6 | 19.6% | $196.0 | -9.9% |
| November | $157.1 | $183.2 | 16.6% | $167.1 | -8.8% |
| December | $151.2 | $175.4 | 16.0% | $132.9 | -24.2% |
| January | $166.4 | $192.1 | 15.4% | | |
| February | $184.3 | $192.1 | 4.2% | | |
| March | $197.4 | $221.1 | 12.0% | | |
| April | $174.2 | $187.9 | 7.9% | | |
| May | $166.0 | $203.4 | 22.5% | | |
| June | $173.0 | $204.1 | 18.0% | | |

Source: City of Carson - 9% TOT Rate

*Table 6: Six Comparables for the Target Hotel in Carson Civic Center*

| Count | Name | Address | City | Year Opened Renovated | Land Area | Rooms | Meeting Space in SF | Parking Stalls | Parking Ratio |
|---|---|---|---|---|---|---|---|---|---|
| 1 | DoubleTree by Hilton | 2 Civic Plaza | Carson | 1988 | 1.44 | 225 | 8,750 | 212 | 0.94 |
| 2 | Sonesta Select | 1925 W 190th St | Torrance | 1990/2011 | 2.91 | 151 | 1,526 | 143 | 0.95 |
| 3 | Marriott Torrance | 3635 Fashion Way | Torrance | 1985/2020 | 8.47 | 491 | 23,418 | 216 | 0.44 |
| 4 | Ascend Collection Bluesten | 2448 Sepulveda Blvd | Torrance | 1984 | 0.82 | 58 | 798 | 53 | 0.91 |
| 5 | Residence Inn Torrance | 3701 Torrance Blvd | Torrance | 1984/2010 | 6.26 | 248 | 816 | 272 | 1.10 |
| 6 | Miyako Hybrid Hotel | 21381 S Western Av | Torrance | 2009 | 2.73 | 208 | 2,410 | 280 | 1.35 |
| | Average | | | | 3.77 | 230 | 6,286 | 196 | 0.85 |

Source: CoStar

*Figure 1: Hotel Occupancy Rates for the Past 12 Month – Hotels within Three Miles of Civic Plaza*

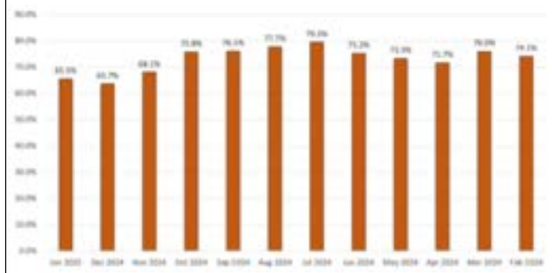
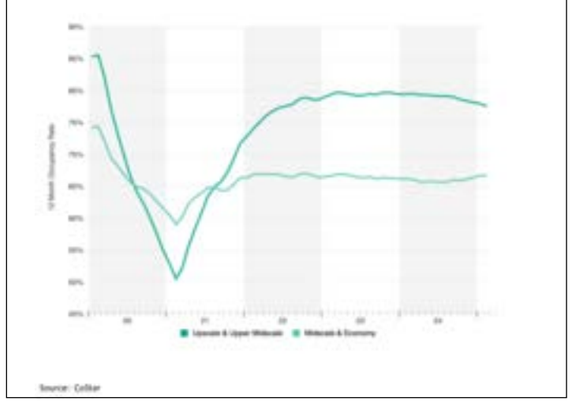


*Figure 2: South Bay Hotel Occupancy by Class – 61 Hotels within Five Miles of Civic Plaza*



## 7.4. MULTI-FAMILY HOUSING MARKET

Given the current supply and demand outlook and a review of comparable hotels, our recommendation for hotel development on the Civic Center campus is for a three-to-four star property in the 240 to 300 room range, or slightly larger than the Double Tree, with 8,000 to 10,000 square feet of conference and/or event space. The market potential for the hotel is enhanced by the creation of a destination via the Specific Plan. Visibility from Carson Street and the I-405 will be important. The target market segment is expected to be business people visiting employment centers in the South Bay, including the Ports of Los Angeles and Long Beach, fans attending games at SoFi Stadium in Inglewood, competitors and sports teams and their entourage visiting Dignity Health Sports Park and out of town visitors to the revamped Carson Event Center and to CSU Dominguez Hills.

### AN IMPORTANT ECONOMIC DEVELOPMENT STRATEGY

While some City incentives are likely required for this hotel to materialize in the near term, this hotel provides a number of important economic development benefits to Carson:

- Once this hotel reaches stabilized operation, it is expected to generate $1.5 million a year in transient occupancy tax revenue and an additional half million in land lease revenue for a total of approximately $2.0 million annually. This number will increase over time with inflation. As a point of comparison, the City's total transient occupancy tax receipts for fiscal year 2023/24 was only $2.4 million.
- Using a five percent bond rate, this $2.4 million per year will support approximately $48 million in new Civic Plaza and public parking garage construction.
- The two hotels combined, the DoubleTree and this new hotel, will make Carson Civic Center a significantly stronger hotel destination in the South Bay market.
- The hotel guests from these two properties will increase the demand for restaurants, bars and coffee shops locally which will contribute to the City's objective of creating a new pedestrian oriented Civic Center campus and downtown district.

Carson historically has had relatively few multi-family units; however, that has changed during the past few years. From 2018 to 2020, Carson added over 800 multi-family units4 (Table 6). Even with this level of recent construction, rents have continued to increase and the vacancy rate has remined low. From 2020 to 2025, the average per square foot rent has grown from $2.31 to $2.74; and the current vacancy rate is a low 2.7 percent suggesting continued strong demand for multi-family housing in Carson. The Carson market absorbed on average approximately 80 units per year over the past decade.

The two notable multi-family projects completed during the past five years include:

- Evolve South Bay at 285 E. Del Amo Blvd – This 300-unit apartment complex was completed in 2020, and asking rent per unit was $3,431 per month. It is built on 11.7 acres for a modest density of 26 units per acre and offers two parking spaces per unit on average.
- Union South Bay at 615 E. Carson Street – This complex contains 357 units and was also completed in 2020. It is a mixed-use project that offer commercial space as well. Built on 5.5 acres, its density is 65 units per acre. With an average asking rent of $2,773 per unit, this project enjoys a low vacancy rate of 3.8 percent.

When the area of analysis was expanded beyond the city boundaries to a three-mile radius of Carson Civic Plaza, the market conclusions do not differ significantly (Table 9). This larger market area added 1,548 units since 2018, and the overall vacancy is still a very low 3.6 percent. This expanded market area absorbed approximately 150 units per year over the last decade.

**Figure 3** 615 E. Carson – Union South Bay



### NEW PROJECTS IN THE DEVELOPMENT PIPELINE

The multi-family development momentum appears to be continuing in Carson. According to the City, three multi-family development projects have been approved and a fourth is under review. They are as follows:

- 20207 South Avalon Boulevard – This 1,213-unit project has been approved was scheduled to start construction in March of 2025. It includes 653 units of apartments, 180 age-restricted senior independent living units and 380 townhouses.
- 21212 to 21240 S. Avalon Boulevard – Another approved project is at this location and consists of 283 townhomes and 32 very low-income affordable rental units.
- 21611 S. Perry Street – A 62-unit condominium development has been approved at this location.
- 215 W. Carson Street – A 35-unit condominium development was under review.

These four projects will add approximately 1,600 units to Carson's housing stock over the next several years. Given the large number of rental apartments built over the past five or six years, developers are shifting their interest to condominiums and townhomes.

### MARKET CONCLUSIONS AND DEVELOPMENT RECOMMENDATIONS

Land Econ's forecast is that the City of Carson will absorb between 1,400 and 2,100 multi-family units over the next two decades. The four projects described above will provide a total of 1,625 units. This supply addition will cover the low demand forecast but will fall 475 units short of the high demand forecast. Considering that the renovated Civic Center campus will provide attractive amenities for residential development, the approximately 140 units suggested in the Vision Plan should be pursued. Assuming excellence in the design and construction of this campus, a condominium project is marketable at this location. However, a condominium development will require fee simple land disposition to the developer and subsequently to the homeowners. Condominium development on leased City property is not recommended as the units would not be salable. If the Civic Center development parcel is available to developers only on a land lease basis, then rental apartments would be the correct strategy.

***Table 8: Carson Multi-Family Market History***

| Period | Inventory Bldgs | Inventory Units | Inventory Avg SF | Effective Rent Per Unit | Effective Rent Per SF | Vacant Units | Vacancy Percent | Occupied Units | Occupancy Percent | Absorption Units | Deliveries Units |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 YTD | 12 | 1,410 | 854 | $2,370 | $2.74 | 38 | 2.7% | 1,372 | 97.3% | (3) | - |
| 2024 | 12 | 1,410 | 854 | $2,286 | $2.65 | 35 | 2.5% | 1,375 | 97.5% | 13 | - |
| 2023 | 12 | 1,410 | 854 | $2,270 | $2.63 | 47 | 3.3% | 1,363 | 96.7% | (20) | - |
| 2022 | 12 | 1,410 | 854 | $2,319 | $2.68 | 28 | 2.0% | 1,382 | 98.0% | 59 | - |
| 2021 | 12 | 1,410 | 854 | $2,143 | $2.48 | 86 | 6.1% | 1,324 | 93.9% | 376 | - |
| 2020 | 12 | 1,410 | 854 | $1,992 | $2.31 | 463 | 32.8% | 947 | 67.2% | 272 | 702 |
| 2019 | 9 | 708 | 829 | $2,102 | $2.43 | 33 | 4.7% | 675 | 95.3% | 26 | 51 |
| 2018 | 8 | 657 | 828 | $2,009 | $2.33 | 8 | 1.2% | 649 | 98.8% | 69 | 65 |
| 2017 | 7 | 592 | 847 | $1,911 | $2.21 | 13 | 2.2% | 579 | 97.9% | (2) | - |
| 2016 | 7 | 592 | 847 | $1,817 | $2.10 | 10 | 1.7% | 582 | 98.3% | 6 | - |
| 2015 | 7 | 592 | 847 | $1,719 | $1.99 | 16 | 2.7% | 576 | 97.2% | 18 | - |
| 2014 | 7 | 592 | 847 | $1,679 | $1.94 | 33 | 5.6% | 559 | 94.4% | 112 | 80 |
| 2013 | 5 | 512 | 847 | $1,648 | $1.91 | 65 | 12.7% | 447 | 87.3% | 103 | 150 |
| 2012 | 4 | 362 | 816 | $1,633 | $1.89 | 18 | 5.0% | 344 | 95.0% | 53 | 65 |
| 2011 | 3 | 297 | 797 | $1,605 | $1.86 | 7 | 2.4% | 290 | 97.6% | 82 | 85 |
| 2010 | 2 | 212 | 875 | $1,588 | $1.84 | 4 | 1.9% | 208 | 98.1% | - | - |
| 2009 | 2 | 212 | 875 | $1,587 | $1.84 | 4 | 1.9% | 208 | 97.9% | (1) | - |
| 2008 | 2 | 212 | 875 | $1,733 | $2.01 | 4 | 1.9% | 208 | 98.2% | (3) | - |
| 2007 | 2 | 212 | 875 | $1,736 | $2.01 | 2 | 0.9% | 210 | 99.1% | - | - |
| 2006 | 2 | 212 | 875 | $1,699 | $1.90 | 2 | 0.9% | 210 | 99.2% | - | - |
| 2005 | 2 | 212 | 875 | $1,565 | $1.81 | 3 | 1.4% | 209 | 98.8% | - | - |

Source: CoStar 4.17.2025

***Table 9: Multi-Family Market History within Three Miles of Civic Plaza***

| Period | Inventory Bldgs | Inventory Units | Inventory Avg SF | Effective Rent Per Unit | Effective Rent Per SF | Vacancy Units | Vacancy Percent | Occupied Units | Occupancy Percent | Absorption Units | Deliveries Units |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 2025 YTD | 32 | 3,664 | 896 | $2,320 | $2.56 | 132 | 3.6% | 3,532 | 96.4% | 49 | 99 |
| 2024 | 31 | 3,565 | 892 | $2,289 | $2.52 | 81 | 2.3% | 3,484 | 97.7% | 160 | 165 |
| 2023 | 29 | 3,400 | 889 | $2,261 | $2.49 | 76 | 2.2% | 3,324 | 97.8% | 96 | 114 |
| 2022 | 27 | 3,286 | 894 | $2,279 | $2.52 | 58 | 1.8% | 3,228 | 98.2% | 54 | - |
| 2021 | 27 | 3,286 | 894 | $2,116 | $2.34 | 111 | 3.4% | 3,175 | 96.6% | 460 | - |
| 2020 | 27 | 3,286 | 894 | $1,978 | $2.18 | 569 | 17.3% | 2,717 | 82.7% | 244 | 702 |
| 2019 | 24 | 2,584 | 899 | $2,028 | $2.24 | 111 | 4.3% | 2,473 | 95.7% | 49 | 51 |
| 2018 | 23 | 2,533 | 900 | $1,933 | $2.13 | 110 | 4.3% | 2,423 | 95.7% | 358 | 417 |
| 2017 | 21 | 2,116 | 877 | $1,889 | $2.08 | 50 | 2.3% | 2,066 | 97.7% | 1 | - |
| 2016 | 21 | 2,116 | 877 | $1,802 | $1.99 | 50 | 2.4% | 2,066 | 97.6% | (2) | - |
| 2015 | 21 | 2,116 | 877 | $1,715 | $1.89 | 48 | 2.3% | 2,068 | 97.7% | 257 | 246 |
| 2014 | 20 | 1,870 | 878 | $1,716 | $1.89 | 60 | 3.2% | 1,810 | 96.8% | 117 | 80 |
| 2013 | 18 | 1,790 | 880 | $1,603 | $1.77 | 96 | 5.4% | 1,694 | 94.6% | 106 | 150 |
| 2012 | 17 | 1,640 | 875 | $1,583 | $1.75 | 51 | 3.1% | 1,589 | 96.9% | 57 | 65 |
| 2011 | 16 | 1,575 | 874 | $1,554 | $1.71 | 43 | 2.7% | 1,532 | 97.3% | 84 | 85 |
| 2010 | 15 | 1,490 | 894 | $1,541 | $1.70 | 42 | 2.8% | 1,448 | 97.2% | 5 | - |
| 2009 | 15 | 1,490 | 894 | $1,539 | $1.70 | 47 | 3.1% | 1,443 | 96.9% | (8) | - |
| 2008 | 15 | 1,490 | 894 | $1,677 | $1.85 | 39 | 2.6% | 1,451 | 97.4% | (12) | - |
| 2007 | 15 | 1,490 | 894 | $1,680 | $1.85 | 28 | 1.9% | 1,462 | 98.1% | (4) | - |
| 2006 | 15 | 1,490 | 894 | $1,589 | $1.75 | 24 | 1.6% | 1,466 | 98.4% | 4 | - |
| 2005 | 15 | 1,490 | 894 | $1,515 | $1.67 | 28 | 1.9% | 1,462 | 98.1% | 6 | - |

Source: CoStar 4.17.2025

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# 8: HISTORIC PRESERVATION

This section focuses on the historic preservation priorities of this Plan. In particular, it focuses on celebrating the value and identitiy of the existing City Hall as an important building within the community and the CIty.

# 8 HISTORIC PRESERVATION

## 8.1. INTRODUCTION & STRATEGY

The CCC Specific Plan acknowledges the heritage value of the Carson City Hall. The Carson City Hall embodies a unique Late Modern design aesthetic with Spanish Colonial Revival influences. Completed in 1976, the building also represents Carson's first purpose-built city hall and is emblematic of the nascent city's forward-thinking optimism and strive to create a better and more equitable future for its residents This Section of the report outlines preservation-related goals to guide a community's efforts in protecting its cultural resources.

The CCC Specific Plan identifies and acknowledges the existing Carson City Hall building as one with historic and heritage value. It embodies a unique Late Modern design aesthetic with Spanish Colonial Revival influences. The California Preservation Foundation, elaborates on the "Community Importance" of the building:

"In an effort to have City Hall's design team reflect the multi-ethnic population of Carson, the City hired a diverse joint venture group, including African American architect Robert Kennard, Japanese American architect Frank Sata, Robert E. Alexander, Japanese American landscape architect Yoshito Kuromiya, and Latino interior and graphic designer Michael Sanchez, to design the building. The City Hall design team employed the popular Late Modern style, while also aiming to reflect the Spanish heritage of the Dominguez Hills area. Completed in 1976, City Hall symbolized the transformation of Carson's existing landscape into a new vision for the future. It marked a significant shift from industrial sprawl to thoughtful urban development in the two decades following incorporation, embodying the city's motto: "Future Unlimited."

The CCC Specific Plan proposes that the building be protected, conserved and reused into a new public facility with uses that are compatible with those of the Civic Center. Following the building and shift of city staff to the new City Hall building, this historic building and its immediate grounds can be upgraded and preprogrammed. The diagrams on the adjoining page show our proposed intentions and concepts for the open spaces around the protected and reused building.

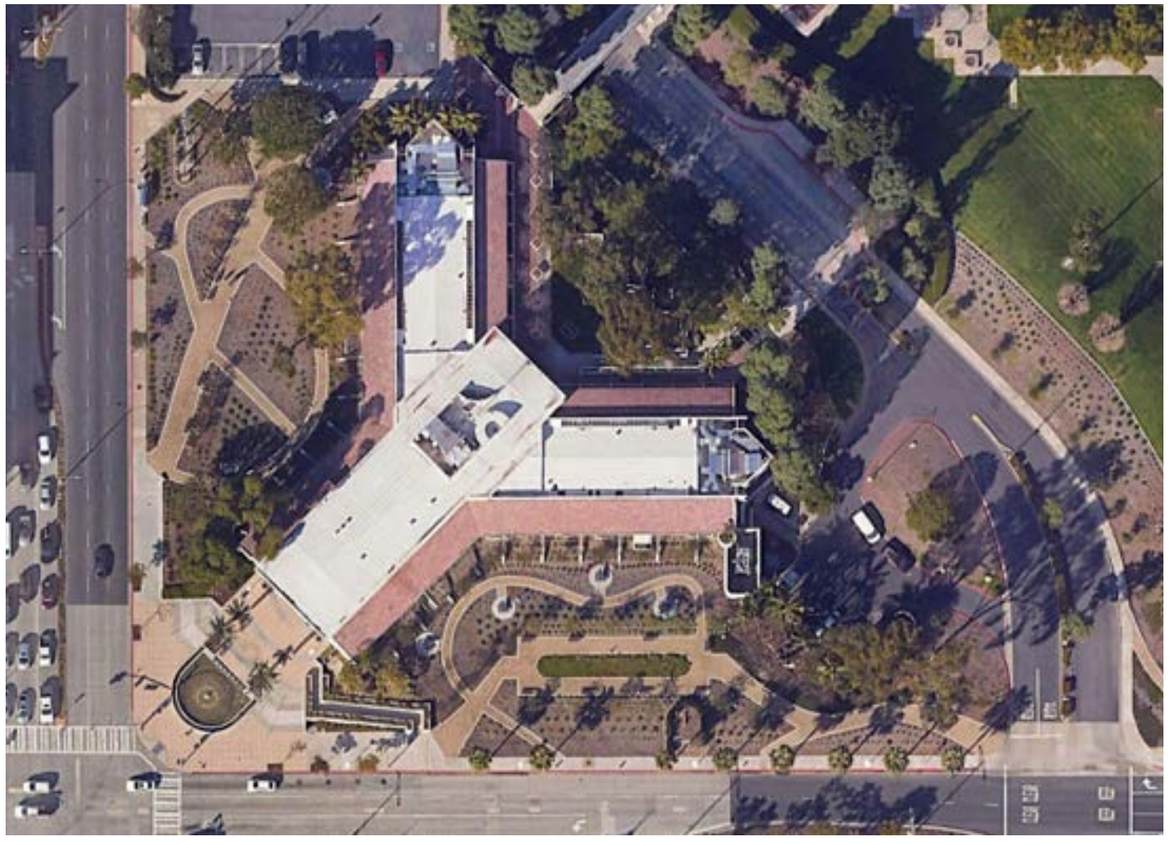




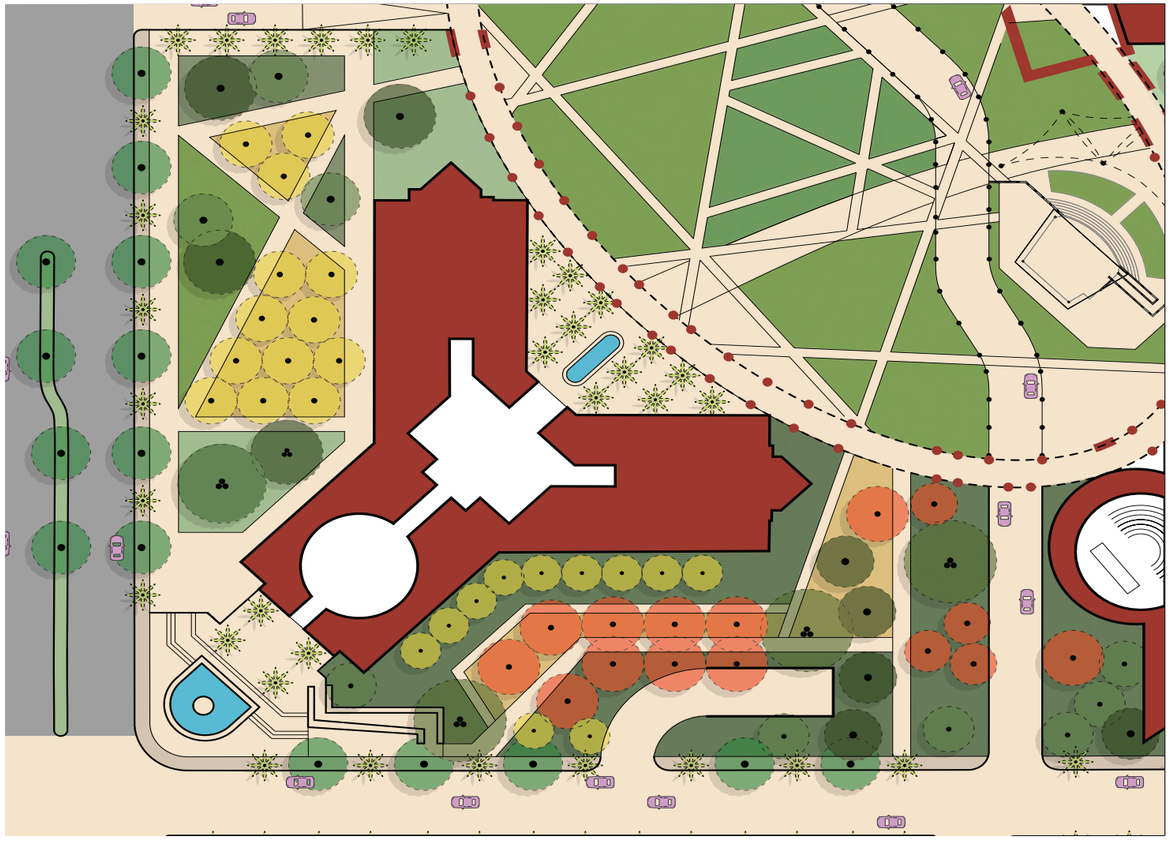





Historic photos of Carson City Hall



EXISITING CONDITION



PROPOSED CONDITION

# 9: IMPLEMENTATION

The following pages map out a list of short and long term strategies that will implement the CCC Specific Plan. The various projects have been categorized into 3 sections for clarity as follws:

1. Street Enhancement Projects
2. Open Space Enhancement Projects
3. Building Projects

# 9 IMPLEMENTATION

## 9.1. IMPLEMENTATION STRATEGIES

The adjoining charts provide a short description of each project and offer suggestions on their potential schedule under the following categories:

Short Term 0 - 5 years

Mid Term 5 - 10 years

Long Term 10 - 20 years

**TABLE 9-1** PROJECTS

**STREET ENHANCEMENT PROJECTS**

| | NAME | TIMEFRAME | LOCATION | DESCRIPTION |
|---|---|---|---|---|
| 1 | Carson Street | Mid Term | Between Avalon Boulevard and Civic Center Plaza | For descriptions of projects 1-9, see Chapter 3 Development Standards and Chapter 5 Mobility |
| 2 | Avalon Boulevard | Short Term | Between Carson Street and Desford Street | |
| 3 | Desford Street | Short Term | Between Avalon Boulevard and eastern boundary of the Civic Center along Desford Street | |
| 4 | Private Roadway | Short Term | Private Roadway along northeastern boundary of the Civic Center | |
| 5 | Civic Plaza Drive | Short Term | Private Roadway along eastern boundary of the Civic Center between Carson Street and the Private Roadway | |
| 6 | Civic Center Drive | Mid to Long Term | Between Carson Street and Desford Street | |
| 7 | New Street North | Mid to Long Term | Between Desford Street and the Jewel Plaza | |
| 8 | New Street Jewel Plaza | Mid to Long Term | Within the Jewel Plaza | |
| 9 | New Street South | Mid to Long Term | Between Carson Street and the Jewel Plaza | |

**OPEN SPACE PROJECTS**

| | NAME | TIMEFRAME | LOCATION | DESCRIPTION |
|---|---|---|---|---|
| 1 | The Jewel Plaza | Short to Long Term | Civic Center | For descriptions of projects 1-5, see Chapter 3 Development Standards |
| 2 | Existing City Hall Open Spaces | Short Term | Civic Center | |
| 3 | New City Hall Green | Mid to Long Term | Civic Center | |
| 4 | New Pedestrian Walkway | Mid to Long Term | Civic Center | |
| 5 | New Civil Rights Garden | Mid to Long Term | Civic Center | |

**TABLE 9-1** PROJECTS

**BUILDING PROJECTS**

| | NAME | TIMEFRAME | LOCATION | DESCRIPTION |
|---|---|---|---|---|
| 1 | Existing City Hall Restoration and Reuse | Mid to Long Term | Civic Center | • 64,000 square feet<br>• Community Services<br>• Cultural Resources Center<br>• Parking provided by shared subterranean parking structure |
| 2 | New City Hall | Mid to Long Term | Civic Center | • 197,000 square feet<br>• City Hall Offices<br>• Retail/Restaurant<br>• Parking provided by shared subterranean parking structure (#9 below)<br>• Lease Office Space |
| 3 | Existing Events Center Enhancement | Short Term | Civic Center | • 90,000 square feet<br>• Community Center<br>• Event Center<br>• Parking provided by shared subterranean parking structure (#9 below) |
| 4 | New Performing Arts Center | Mid to Long Term | Civic Center | • 124,000 square feet<br>• Main 2,000-seat Theater<br>• 150-seat Black Box Theater<br>• Parking provided by shared subterranean parking structure (#9 below) |
| 5 | New Mixed-Use Housing with Bus Depot and Above-Ground Parking Garage | Mid to Long Term | Civic Center | • Housing (140,000 square feet)<br>• Retail/Restaurant<br>• Bus Depot (Ground Level - 60,000 square feet)<br>• Podium parking structure (podium above bus depot and below housing - 240,000 square feet) |
| 6a | New Hotel and Podium Parking | Mid to Long Term | Civic Center | • 380,000 square feet (240,000 square foot hotel + 140,000 square foot  podium parking structure)<br>• 120,000 square foot amenity deck (not included within the 380,000 total building square footage)<br>• Retail/Restaurant<br>• Entertainment |
| 6b | ALTERNATIVE: Entertainment Retail Pavilion Complex | Mid to Long Term | Civic Center | • 130,000 square feet of retail space<br>• 30,000 square feet of restaurant space<br>• 30,000 square feet of museum space (interactive museum)<br>• 50,000 square foot “Mega Sports Bar” (similar to Cosm)<br>• Parking in attached above-grade podium |
| 7 | New Jewel Plaza Colonnade | Mid to Long Term | Civic Center | For descriptions of project, see Chapter 3 Development Standards |

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# Report to Planning Commission

Tuesday, January 27, 2026, 6:30 PM

NEW PUBLIC HEARING 7B.

| | |
|---|---|
| TO: | Planning Commission |
| FROM: | Nathan Freeman, Director of Community and Economic Development |
| PREPARED BY: | Benjamin R. Jones , City Attorney - Aleshire & Wynder, LLP |
| SUBJECT: | PUBLIC HEARING TO CONSIDER ADOPTION OF RESOLUTION NO. 26-2898, RECOMMENDING CITY COUNCIL APPROVAL OF AN AMENDED AND RESTATED DEVELOPMENT AGREEMENT NO. 23-19 BETWEEN THE CITY OF CARSON, IMPERIAL AVALON, LLC, AND LENNAR HOMES OF CALIFORNIA, LLC FOR A MIXED-USE PROJECT LOCATED AT 21207 SOUTH AVALON BOULEVARD |

PROJECT/APPLICATION INFORMATION

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|---|---|
| Project Summary: | Recommendation of City Council Approval of an Amendment and Restatement to an existing Development Agreement for the approved Imperial Avalon Mixed-Use Project |
| Project Location: | 21207 South Avalon Blvd. |
| General Plan/Zoning: | Imperial Avalon Specific Plan |
| Project Applicant: | Imperial Avalon, LLC |
| Project Owner: | Imperial Avalon, LLC; Lennar Homes of California, LLC |

## I. OVERVIEW

### A. Introduction and Background

On December 13, 2022, the City adopted Ordinance No. 22-2222, approving Development Agreement No. 23-19 (Exhibit 1) between the City and Imperial Avalon LLC for a mixed-use residential and commercial project on the real property located at 21207 South Avalon Boulevard in the City (“Property”). The project consists of 764 multi-family residential units in two buildings of up to four stories each, 351 attached/detached and stacked flat townhome units of up to three stories each, 111,581 square feet of publicly accessible open space (including a minimum 22,859 square foot park), and 10,000 square feet of commercial restaurant space (the “Project”).

In connection with Development Agreement No. 23-19, the City also conditionally approved the following entitlements for the Project in December 2022 (collectively, the "Original Entitlements"): (1) certification of an Environmental Impact Report (SCH No. 2021010116; the "EIR") for the Project; (2) General Plan Amendment ("GPA") No. 105-19, to change the land use designation of the Property from Regional Commercial/Low Density Residential to Urban Residential; (3) Specific Plan ("SP") No. 21-19, the Imperial Avalon Specific Plan ("IASP"), to establish the development standards and permitted uses for the Property; (4) Zone Change ("ZCC") No. 188-19, to change the Property's zoning from Commercial Automotive/RM-8-D to Imperial Avalon Specific Plan; (5) Site Plan Review and Design Review ("DOR") No. 1803-19; and (6) Vesting Tentative Tract Map ("VTTM") No. 83157.

The Original Entitlements were approved subject to Conditions of Approval. Among them, Exhibit "B" of Planning Commission Resolution No. 22-244 imposes Conditions of Approval on the DOR No. 1803-19 ("DOR COAs"), and Exhibit "C" of Planning Commission Resolution No. 22-244, as amended by City Council Resolution No. 22-242, imposes Conditions of Approval on VTTM No. 83157 ("VTTM COAs").

The Development Agreement and some of the Original Entitlements, including the DOR COAs and VTTM COAs, were subsequently amended through multiple Minor Modifications requested by Imperial Avalon and approved by the City's Community Development Director pursuant to Section 12.4 of the Development Agreement, as follows (Exhibits 3-7; collectively, the "Minor Modifications"):

- A Minor Modification approved on May 24, 2023, made revisions to the Development Agreement and resolved an inconsistency between the Specific Plan and the approved Project plans regarding the required Project building setback from the 405 freeway.

- A Minor Modification approved on February 28, 2024, made revisions to the Development Agreement. This Minor Modification was approved pursuant to a Settlement Agreement and Mutual Release between the City and Imperial Avalon, which became effective on or about February 28, 2024 ("Original Settlement Agreement").

- A Minor Modification approved on June 10, 2024, made revisions to the Development Agreement, the DOR COAs, the VTTM COAs, and the Mitigation Monitoring and Reporting Program Table included as Section 4.2 in the Final EIR.

- A Minor Modification approved on May 8, 2025, made revisions to the Development Agreement.

- A Minor Modification not yet approved as of the writing of this report, which provides for revisions to the Development Agreement, the DOR COAs, and the VTTM COAs ("Minor Mod 5"). Minor Mod 5 is pursuant to an Amendment and Restatement of the Original Settlement Agreement, and would replace the Minor Modification approved on February 28, 2024. The proposed Amended and Restated Development Agreement includes the modifications that would be made by approval of Minor Mod 5.

Lennar Homes of California, LLC, ("Lennar") purchased from Imperial Avalon, LLC the portion of the Property that will contain the Townhomes ("Transferred Property") and entered into a Partial Assignment and Assumption Agreement with Imperial Avalon, recorded on October 1, 2024 (Exhibit 2; "A/A Agreement"), under which Imperial Avalon assigned to Lennar and Lennar assumed from Imperial Avalon all of Imperial Avalon's rights and obligations regarding the Transferred Property, including rights and obligations under the Development Agreement, as more fully described in the A/A Agreement. The City consented to the assignment and assumption effectuated through the A/A Agreement, as required by Section 11 of the Development Agreement. Imperial Avalon and Lennar are referred to below collectively as the "Developer".

B. Current Application

In or about December of 2025, Developer submitted to the City an application to amend and restate the Development Agreement, in order to incorporate and integrate the changes made through the Approved Minor Modifications into one consolidated document, with no new substantive modifications, pursuant to Government Code Sections 65864 through 65869.5 ("Amended and Restated Development Agreement"). The request is for the purpose of ease of reference and understanding of the applicable development agreement provisions, which can facilitate the Developer's ability to take the necessary actions (e.g., obtaining construction loans) to complete the project. Approval of the proposed Amended and Restated Development Agreement (Exhibit 9) would do so. The provisions of the Amended and Restated Development Agreement are consistent with the general plan and applicable specific plan, as provided in the proposed resolution and Amended and Restated Development Agreement.

The request also includes the incorporation and integration of the modifications made to the DOR COAs and VTTM COAs through the Approved Minor Modifications, without substantive change, into one consolidated amended and restated set of COAs, which would be Exhibit D to the Amended and Restated Development Agreement. The proposed amended and restated set of COAs is attached separately to this report as Exhibit 10.

## II. ENVIRONMENTAL REVIEW

The Amended and Restated Development Agreement was adequately assessed by the Environmental Impact Report for the Project (available at: https://ci.carson.ca.us/CommunityDevelopment/ImperialAvalon.aspx) and there are no circumstances requiring additional environmental review. Specifically, no substantial changes are proposed in the Project that will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; no substantial changes have occurred with respect to the circumstances under which the Project will be undertaken which will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and there is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete, that shows any of the following: (A) the Project will have one or more significant effects not discussed in the EIR; (B) significant effects previously examined will be substantially more severe than shown in the EIR; (C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measure or alternative; or (D) mitigation measures or alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

Furthermore, approval of the Amended and Restated Development Agreement is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Here, it can be seen with certainty that there is no possibility that the amendments made to the Amended and Restated Development Agreement may have a significant effect on the environment because the amendments simply integrate modifications to the Development Agreement that were previously approved and are primarily related to the payment of fees and the provision of public benefits, rather than making physical changes to the Project or Project site.

Consequently, approval of the Amended and Restated Development Agreement does not require any additional environmental review.

## III. PUBLIC HEARING NOTICE

City staff duly issued notice of a Planning Commission public hearing to consider this item as required by law. By January 13, 2026, the notice was published in a newspaper of general circulation within the City, and posted in the designated public places.

## IV. CONCLUSION AND RECOMMENDATION

Staff is recommending that the Planning Commission:

- Open the public hearing, take public comment, and close the public hearing; and
- Adopt Planning Commission Resolution No. 26-2898, “A Resolution of the Planning Commission of the City of Carson Recommending the Carson City Council Approve Amended and Restated Development Agreement No. 23-19 Between the City of Carson, Imperial Avalon, LLC, and Lennar Homes of California, LLC for a Mixed-Use Project Located at 21207 South Avalon Boulevard”.

## V. ATTACHMENTS

1) Approved Development Agreement No. 23-19 between the City and Imperial Avalon, LLC

2) A/A Agreement between Imperial Avalon, LLC and Lennar Homes of California, LLC

3) Minor Modification approved on May 24, 2023

4) Minor Modification approved on February 28, 2024

5) Minor Modification approved on June 10, 2024

6) Minor Modification approved on May 8, 2025

7) Minor Mod 5

8) (Draft) PC Resolution No. 26-2898

9) (Draft) Amended and Restated Development Agreement No. 23-19 between the City of Carson, Imperial Avalon, LLC, and Lennar Homes of California, LLC (Exhibit A to Resolution 26-2898)

10) (Draft) Amended and Restated COAs (Exhibit D to Amended and Restated Development Agreement)

**Attachments**

Imperial Avalon Development Agreement 11-16-2023 (fully executed_recorded)(1022789.1).pdf
24-1001_IA-Lennar-RecordedPartialAssignmentAssumption(2081664.1).pdf
23-0524_IA DA_MinorMod(1)_FullyExecuted.pdf
24-0228_IA DA_MinorMod(2)-Executed.pdf
6.10.2024_Imperial Avalon DA Minor Modification (1000987.1).pdf
25-0508_IA DA_MinorMod(4)_Executed.pdf
Minor Mod 5 (Draft Jan 2026).pdf
Resolution 26-XX re_ Amended and Restated DA with Imperial Avalon (Draft 1.27.26 PC Reso) (2078967.5).pdf
Imperial Avalon_Amended Restated DA (markup of Original DA) (PC 1.27.26)(2080828.4).pdf
Imperial Avalon_Amended and Restated DA_Exhibit D COAs (PC 1.27.26) (2079782.6).pdf

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RECORDING REQUESTED BY:

**AND WHEN RECORDED MAIL TO:**

NAME City of Carson

MAILING ADDRESS 701 E. Carson St.

CITY, STATE & ZIP CODE

Carson, CA 90745

Attention: Planning Manager

06/04/2024

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**TITLE(S)**

Development Agreement - Imperial Avalon

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City of Carson
701 E Carson Street
Carson, CA 90745
Attn: Planning Manager

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# DEVELOPMENT AGREEMENT

This Development Agreement ("Agreement") is entered into on the 16th day of November, 2023 ("**Execution Date**"), by and between the City of Carson, a municipal corporation of the State of California ("**City**"), and IMPERIAL AVALON, LLC, a California limited liability company ("**Developer**"). The City and Developer shall be referred to jointly within this Agreement as the "Parties" and individually as a "Party."

Signed in counterpart

## RECITALS

A. *The Development Agreement Statute.* California Government Code Sections 65864 *et seq.* ("**Development Agreement Law**") authorizes cities to enter into binding development agreements with persons having a legal or equitable interest in real property for the development of such property, all for the purpose of strengthening the public planning process, encouraging private participation, and comprehensive planning and identifying the economic costs of such development.

B. *Orderly Development; Public Benefits.* The City Council finds that this Agreement is in the best public interest of the City and its residents, adopting this Agreement constitutes a present exercise of the City's police power, and this Agreement is consistent with the City's General Plan. This Agreement and the proposed Project will achieve a number of City objectives, including the orderly development of the Property and the provision of public benefits, or funds therefor, to the City and its residents.

C. *The Property.* Developer owns the property located at 21207 South Avalon Boulevard in the City of Carson, County of Los Angeles, State of California (APNs 7337-001-025, 7337-001-026, 7337-001-027, 7337-001-028, and 7337-001-029) ("**Property**"). The General Plan land use designation for the Property is Regional Commercial and Low Density Residential and the Property is zoned Commercial Automotive (CA) and RM-8-D (Design Overlay). The City is currently in the process of updating its General Plan. The Carson General Plan 2040 Update identifies the site as "Downtown Mixed Use." The Property is currently improved and in operation as a mobilehome park, known as Imperial Avalon Mobile Estates ("**Imperial Avalon**" or the "**Park**").

D. *The Park.* Developer filed an application for approval of Relocation Impact Report No. 05-20 ("**RIR**") related to Park closure pursuant to CMC Section 9128.21 in early 2020 (the "**Closure Application**"). The Closure Application was heard and conditionally approved by the City's Planning Commission on May 13, 2020, via adoption of Planning Commission Resolution No. 20-2695. Following an administrative appeal to the City Council, on July 7, 2020, the City Council adopted City Resolution No. 20-113, affirming

the Planning Commission's decision subject to imposition of added and modified conditions as set forth the "Amended Conditions of RIR No. 05-20" which are attached to said resolution ("the **RIR Conditions**"), and specifying the earliest possible date of Park closure (i.e., the earliest date when residents may be compelled to vacate the Park) as January 1, 2022, subject to issuance of the required notices of termination of tenancy (the "**Closure Approval**"). As required by the Closure Approval, Developer has executed and recorded on title to the Property a "Declaration of Lease Covenants, Conditions and Restrictions Applicable to Park Closure Pursuant to Government Code § 27281.5" (the "**Option C Covenant**"). Furthermore, Developer has agreed to provide certain enhancements to the relocation impact mitigation measures set forth in the RIR Conditions for the benefit of the displaced Park residents, which enhancements were set forth in a letter from Developer to the Park residents dated September 9, 2021, and Developer may agree to provide further enhancements at a later date (collectively, the "**Enhancements**"). Developer has not yet issued the required 6-month notice of termination of tenancy, which is a prerequisite of Park closure. As of the Effective Date hereof, some residents remain in the Park while some have vacated the Park voluntarily pursuant to early termination agreements entered into with the Developer in accordance with the RIR Conditions, and implementation/satisfaction of the RIR Conditions remains pending and underway. Developer still intends, and has the right, to issue the requisite 6-month notice of termination of tenancies and thereafter close the Park during the effective period of the Closure Approval, although the precise dates of such actions are not currently known. It is understood and was decided by the City in acting upon the Closure Application that the Closure Application and the City's review and decision thereon was exempt from California Environmental Quality Act ("**CEQA**") review and did not constitute a "project" within the meaning of CEQA. On that basis, a Notice of Exemption was filed in connection with the Closure Approval on July 17, 2020, and no CEQA-related challenges were filed within the applicable 35 day statute of limitations period.

E. *The Project.* Developer desires to re-develop the Property as a mixed-use residential and commercial development (the "**Project**"). The Project consists of 764 multi-family residential units within two buildings of up to four stories (or sixty-eight feet, six inches [68'6"] each, including at least one parking structure per building, each on their own lot on the eastern portion of the Property (the "**Apartments**"), 351 attached/detached and stacked flat townhome units of up to three stories (or thirty-eight feet, six inches [38'6"]) each, all located on another lot on the western portion of the Property (the "**Townhomes**"), for a total of 1,115 residential units and a density of 41 dwelling units per acre, 111,581 square feet of publicly accessible open space (including a minimum 22,859 square foot park), and 10,000 square feet of commercial space, all of which shall be restaurant use(s). To that end, on October 3, 2019, Developer filed a development permit application with the City (Master Redevelopment Project No. PL10044) seeking various entitlements to develop the Project (collectively, the "**Development Application**"). The City determined the Development Application complete on December 24, 2019.

F. *Project EIR and Entitlements.* The City is the lead agency, within the meaning of the California Environmental Quality Act, Public Resources Code § 21000 *et seq.* ("**CEQA**"), for purposes of conducting environmental review of the Project. The City finds and determines that all actions required of City precedent to approval of this Agreement have been duly and regularly taken. In accordance with the requirements of the California

Environmental Quality Act (Public Resources Code § 21000, *et seq.* ("**CEQA**"), appropriate studies, analyses, reports, documents, and errata were prepared and considered by the Planning Commission and the City Council. The Planning Commission, after a duly noticed public hearing on November 21, 2022, certified the Environmental Impact Report ("**EIR**") and adopted a Statement of Overriding Considerations for the Project in accordance with CEQA. The Project is identified in the EIR as Alternative 3 and is fully assessed in the EIR and the errata thereto.

G. *Project Approvals.* On the same day, the Planning Commission, after giving notice pursuant to the CMC and Government Code §§ 65090, 65091, 65092 and 65094, held a public hearing on the Development Application, and following the hearing, adopted Planning Commission Resolution No. 22-2846, which: (i) made CEQA findings and determinations as referenced above; (ii) conditionally approved Site Plan and Design Overlay Review ("**DOR**") No. 1803-19 and Vesting Tentative Tract Map ("**VTTM**") No. 83157 for the Project subject to City Council approval of General Plan Amendment ("**GPA**") No. 105-19 (changing the General Plan land use designation for the Property from Regional Commercial/Low Density Residential to Urban Residential), Specific Plan ("**SP**") No. 21-19 (Imperial Avalon Specific Plan), Zone Change ("**ZCC**") No. 188-19 (changing the Property zoning from Commercial Automotive (CA)/Residential, multifamily – 8 units per acre (RM-8) with a Design Overlay to Imperial Avalon Specific Plan [IASP]), and Development Agreement ("**DA**") No. 23-19 (this Agreement, inclusive of the Adopting Ordinance); and (iii) recommended that the City Council approve GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 for the Project (DOR No. 1803-19, VTTM No. 83157, GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 collectively, together with the EIR, the "**Entitlements**").

H. On December 6 , 2022, the City Council, after provision of the public notice required by law, held a public hearing to consider the Development Application and the Planning Commission's actions and recommendations thereon, and following the hearing, conditionally approved GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 as set forth in City Council Resolution No. 22-2846. The Planning Commission and the City Council have found, on the basis of substantial evidence based on the entire administrative record, that this Agreement is consistent with all applicable plans, rules, regulations and official policies of the City.

I. *Developer's Interest in the Property.* Developer currently owns the Property and as such, possesses the requisite equitable interest in the Property under Government Code Section 65865 that allows the Parties to enter into this Agreement.

## COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

### 1. GENERAL DEFINITIONS.

In addition to those terms defined within the above Recitals and elsewhere within this Agreement, the following terms shall bear the meanings set forth below:

**1.1** "**Adopting Ordinance**" means Ordinance No. 22-2222 approving this Agreement, introduced on December 6, 2022 and adopted on December 13, 2022.

**1.2** "**Agreement**" means this Development Agreement, including all of its exhibits.

**1.3** "**Annual Review**" means the annual review of the Developer's performance under this Agreement in accordance with Article 6 of this Agreement.

**1.4** "**Applicable Laws**" means, collectively, the following:

a. The Project Development Approvals.

b. The Existing Land Use Regulations.

c. Subsequent Development Approvals.

d. Those Subsequent Land Use Regulations to which Developer has agreed in writing.

e. The Closure Approval and associated covenants and agreements, including without limitation the Option C Covenant and the Enhancements.

**1.5** "**Approval Date**" means the date on which the City Council conducted the second reading of the Adopting Ordinance. That date is December 13, 2022.

**1.6** "**CFD**" means any Community Facilities District that is applicable to the Property and formed pursuant to the Mello Roos Community Facilities Act of 1982.

**1.7** "**City**" means the City of Carson, a California Charter city.

**1.8** "**City Council**" means the City Council of the City of Carson.

**1.9** "**CMC**" means the Carson Municipal Code.

**1.10** "**Conditions of Approval**" means all conditions imposed on the Project by the City, including (without limitation) those recommended by the Los Angeles County Fire Department, as part of the approval of the Project.

**1.11** "**Director**" means the City's Community Development Director, or his or her designee.

**1.12** "**Developer**" means IMPERIAL AVALON, LLC, a California limited liability company, and its successors and assigns to all or any part of the Property.

**1.13** "**Developer's Vested Right**" means Developer's right to complete the Project in accordance with, and to the full extent permitted under, the Applicable Laws and this Agreement, as more fully set forth in Articles IV-V of this Agreement.

**1.14** **"Development"** means the improvement of the Property for the purposes of completing the structures, improvements, and facilities comprising the Project including, but not limited to: grading; the construction of infrastructure related to the Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping and other facilities and improvements necessary or appropriate for the Project, and the maintenance, repair, or reconstruction of any building, structure, improvement, landscaping or facility after the construction and completion thereof.

**1.15** **"Development Approvals"** means all Project-specific non-legislative approvals. Development Approvals include, but are not limited to, plans, maps, permits, site plans, design guidelines, variances, conditional use permits, grading, building, and other similar permits, environmental assessments, including environmental impact reports, and any amendments, addenda or modifications to those matters. "Development Approvals" does not include (i) rules, regulations, policies, and other enactments of general application within the City, (ii) legislative enactments, or (iii) any matter where City has reserved authority under Article 5 of this Agreement. Development Approvals are not Land Use Regulations.

**1.16** **"Development Plan"** means Developer's plan for completion of the Project in compliance with and to the full extent of the Project Development Approvals and Applicable Laws.

**1.17** **"Effective Date"** means the date on which the Adopting Ordinance becomes effective, or thirty (30) days after the second reading of the Adopting Ordinance.

**1.18** **"Entitlements"** means this Agreement, and the other Entitlements and approvals listed in Recital G.

**1.19** **"Exhibit"** means an exhibit to this Agreement, unless otherwise specifically referenced to a different agreement or document. The following exhibits are incorporated into the Agreement by reference as though set forth in full:

| | |
|---|---|
| Exhibit A | Legal description of the Property |
| Exhibit B | Depiction of the Property |
| Exhibit C | Public Open Space Areas |
| Exhibit D | Pedestrian Bridge |

**1.20** **"Existing Land Use Regulations"** means (i) all Land Use Regulations in effect on the Effective Date and (ii) any changes to Land Use Regulations enacted on or after the Approval Date and before the Effective Date for which Developer has provided its written consent to allow those changes to apply to the Project.

**1.21** **"Land Use Regulations"** are laws and regulations enacted through legislative actions of the City Council. Land Use Regulations include ordinances, laws, resolutions, codes, rules, regulations, policies, requirements, guidelines or other actions of City, including but not limited to the City's General Plan and the CMC (including the Carson Zoning Ordinance, Chapter 1 of Article IX of the CMC) which affect, govern or apply to the development and use of the Property, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, the maximum height and size of proposed buildings, the

provisions for reservation or dedication of land for public purposes, and the design, improvement, and construction standards and specifications applicable to the Project. "Land Use Regulations" do not include (i) Development Approvals, (ii) regulations relating to the conduct of business, professions, and occupancies generally, (iii) taxes and assessments, (iv) regulations for the control and abatement of nuisances, (v) health and safety regulations, or (vi) any other matter reserved to the City pursuant to Article 5 of this Agreement.

**1.22** **"Mortgage"** means a mortgage, deed of trust, or other security instrument encumbering the Property.

**1.23** **"Mortgagee"** means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security device, a lender, or each of their respective successors and assigns.

**1.24** **"Project"** as described this Agreement, means the development of the Property consistent with and to the full extent of the Project Development Approvals and all applicable Land Use Regulations.

**1.25** **"Project Development Approvals"** means all Development Approvals, inclusive of the Entitlements and all Conditions of Approval. Project Development Approvals include, without limitation, all Development Approvals needed or desired by Developer to complete the Project, provided that those Development Approvals are consistent with Developer's Vested Right, this Agreement, and the City's General Plan and the Carson Zoning Ordinance. The Entitlements (minus this Agreement), as examples of Project Development Approvals, have been or are anticipated to be approved, subject to the Conditions of Approval, prior to or in conjunction with the approval of this Agreement.

**1.26** **"Property"** means the real property described in Exhibit "A" and shown in Exhibit "B."

**1.27** **"Reservation of Authority"** means the limitations, reservations, and exceptions to Developer's Vested Right set forth in Article 5 of this Agreement.

**1.28** **"Subsequent Land Use Regulations"** means those Land Use Regulations which are both adopted and effective on or after the Approval Date and which are not included within the definition of Existing Land Use Regulations.

**1.29** **"Subsequent Development Approvals"** means all Development Approvals issued subsequent to the Effective Date in connection with development of the Property, which shall include, without limitation, any changes to the Development Approvals.

**1.30** **"Term"** shall have the meaning ascribed to it in Section 2.1, unless earlier terminated as provided in this Agreement.

## 2. TERM & GENERAL COVENANTS.

**2.1** **Term**. The term of this Agreement (the "**Term**") starts on the Effective Date and shall expire 15 years after City's approval of the last of the Entitlements, subject to any early termination provisions described in this Agreement. The Term and expiration date of all

Entitlements and Project Development Approvals shall also be extended to 15 years consistent with the Term of this Agreement.

**2.2 Binding Effect of Agreement.** From and following the Effective Date, actions by the City and Developer with respect to the development of the Property for completion of the Project, including actions by the City on applications for Subsequent Development Approvals affecting the Property, shall be subject to the terms and provisions of this Agreement.

**2.3 Agreement Runs with the Land.** This Agreement shall be recorded and shall run with the land. Pursuant to Government Code Section 65868.5, the burdens of this Agreement and each of its provisions shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the Parties, including, but not limited to, all parties that enter into lease agreements with Developer for possession of any part of the Property.

**2.4 Covenant Against Discrimination.** The Developer covenants that, by and for itself, its heirs, executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry in the performance of this Agreement. The Developer shall take affirmative action to ensure that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry.

**2.5 Construction Timing and Park Closure.** Developer covenants that Project construction will not commence until the existing mobilehome park at the Property (i.e., the Park) has been closed and all remaining Park residents or occupants have vacated the Property.

**2.6 Park Closure Application and Covenants.** Developer further acknowledges that nothing in this Agreement is intended to supersede or negate the benefits committed to Park residents (current or former) approved through the separate Closure Approval or associated covenants or agreements, including the Option C Covenant and the Enhancements, which are unrelated to the Project and this Agreement.

## 3. DEVELOPER'S OBLIGATIONS AND COMMUNITY BENEFITS.

As consideration for the granting of Developer's Vested Right in accordance with Article 4 below and subject to the City's Reservation of Authority set forth in Article 5 below, Developer shall do all of the following:

### 3.1 Comprehensive Development Agreement Fee

In lieu of the Developer and the Project opting into Citywide Community Facilities District No. 2018-01 ("CFD") (estimated to have a net present value over the life of this Agreement of approximately fourteen million six hundred fifty-eight thousand three hundred sixty-two dollars ($14,658,362.00) and paying Development Impact Fees pursuant to Ordinance No. 19-1931 (estimated to be approximately thirteen million one hundred twenty-seven thousand fourteen dollars ($13,127,014.00) based on current Project features), Developer shall pay a Development Agreement Fee totaling thirty million fifteen thousand three hundred seventy-six dollars ($30,015,376.00) (the "Development Agreement Fee") (this includes an additional fee of $2,000

per residential unit multiplied by 1,115 units even if fewer units are constructed pursuant to Section 12.5 (equal to two million two hundred thirty thousand dollars ($2,230,000.00)). Developer shall have the right, in its sole and absolute discretion, to pay the Development Agreement Fee as prescribed below or cause the Development Agreement Fee contributions and payments to be made by a nonprofit entity in accordance with the terms prescribed by this Agreement. Except as otherwise provided for the Carson Park and Recreation Subsidy and the Initial DA Fee Payment in Sections 3.1.1-3.1.2, the amounts prescribed below shall be paid either by the Developer or the nonprofit entity at the City's direction toward specific programs, projects or uses within the following categories: (i) park, recreational and open space site acquisition, facility development and maintenance, (ii) City infrastructure improvements, maintenance and upgrades, and (iii) community recreational benefits and subsidies ("Development Agreement Fee Categories"). The Development Agreement Fee payments are limited to the amounts and subject to the schedule set forth below, unless the Developer and City agree to an earlier payment date, and shall be paid directly from the Developer or the nonprofit entity to the City:

3.1.1 Three hundred thousand dollars ($300,000.00) shall be due upon the Effective Date of this Agreement, and shall be used by City to subsidize Carson residents' fees and costs associated with park and recreational registration, trophies and jerseys ("Carson Park and Recreation Subsidy").

3.1.2 Five million dollars ($5,000,000.00) shall be due prior to issuance of a grading permit for the Project ("Initial DA Fee Payment"). The City shall have the option to use the Initial DA Fee Payment in whole or in part for low income housing including but not limited to maintenance and upgrades to, and assistance with the preservation of, existing mobilehome parks located throughout the City.

3.1.3. Five million dollars ($5,000,000.00) shall be due prior to issuance of a building permit for the first Townhome to be constructed within the Project.

3.1.4. Four million dollars ($4,000,000.00) shall be due prior to issuance of a building permit for the first Apartment building to be constructed within the Project, and a second payment of four million dollars ($4,000,000.00) shall be due upon issuance of a building permit for the second Apartment building to be constructed within the Project, and a third payment of four million dollars ($4,000,000.00) shall be due upon issuance of a building permit for the 50th Townhome building to be constructed within the Project.

3.1.5 Five million dollars ($5,000,000.00) shall be due within six months following issuance of a certificate of occupancy for the first Apartment building to be constructed within the Project.

3.1.6. Two million seven hundred fifteen thousand three hundred and seventy-six dollars ($2,715,376.00) shall be due prior to issuance of a building permit for the 150th Townhome to be constructed within the Project.

### 3.2 Nonprofit Entity

In the event that the payments outlined in Section 3.1 are made by a nonprofit, such nonprofit will be formed pursuant to Internal Revenue Code Section 501(c)(3) and will be authorized to manage and distribute Development Agreement Fee funds for the purposes described

in Section 3.1 ("Nonprofit"). Developer shall provide City with copies of all documents related to the creation and ongoing operation of the Nonprofit, including but not limited to the governing instruments, the application(s) for tax exemption under federal and state law, any exemption approvals, and annual tax forms. City shall not be obligated to review and/or approve any such documents or filings. Developer is solely responsible for the accuracy and timely filing of all such documents and shall obtain its own tax advice.

Developer shall comply with all federal and state laws governing the creation and operation of the Nonprofit. If Developer receives notice from the IRS or State of a suspension or revocation of nonprofit status or any other issue, Developer shall inform City immediately of the notice and the affirmative steps Developer will take to cure any suspension or revocation or other issue.

City does not represent or warrant that the management and distribution of Development Agreement Fee funds by the Nonprofit is authorized by federal or state law. Developer and its successors shall be jointly and severally liable with the Nonprofit for payment of the Development Agreement Fee in accordance with this Agreement. If the Nonprofit fails to make Development Agreement Fee payments, or if the Nonprofit's exempt status is suspended or revoked, Developer shall make the Development Agreement Fee payments prior to the issuance of the permits and certificates described in Section 3.1.

### 3.3 Affordable Housing Benefit

The City, by its General Plan and state law, is committed to increasing its supply of affordable housing. Prior to the issuance of a certificate of occupancy for the first Apartment building constructed on the Property, the Developer, or a related/affiliated entity approved by the Director and jointly and severally liable with Developer (and subject to Section 3.3.4 below), shall perform one of the following affordable housing public benefit options, the selection of which shall be in its sole and absolute discretion: (i) commit, via execution and recordation on title to the Property of a deed restriction in a form acceptable to the City Attorney, to reserve at least 125 units of lower income housing, including 41 units of Extremely Low Income (<30% of Area Median Income ["**AMI**"]), 41 units of Very Low Income (30-50% AMI), and 43 units of Low Income (51-80% AMI) (all of the foregoing affordable housing categories collectively, "**Lower Income Housing**," or "**LIH**"), onsite within the Project; (ii) commit, via execution and recordation on title to the below-referenced (in this Section and Sections 3.3.1 - 3.3.2) offsite-location of a deed restriction in a form acceptable to the City Attorney, to construct or convert (from existing units) 125 units of new LIH at an off-site location elsewhere in the City, which off-site location is subject to approval of the Director, and which units must be in excess of any affordable housing requirements otherwise required for the project site within which they will be constructed; or (iii) pay an in lieu affordable housing fee equal to $11.61 per square foot of the Project's gross residential floor area for the Apartments and Townhomes. If in any case where the Developer provides only a portion of the 125 Lower Income Housing units referenced above, Developer may satisfy the balance of the affordable housing obligation by paying a proportionately-reduced in lieu fee payment. For example, if Developer provides seventy-five (75) percent of the 125 Lower Income units, then the balance of the affordable housing obligation may be satisfied by paying twenty-five (25) percent of the required in lieu fee payment.

3.3.1 Should Developer or the related/affiliated entity elect to satisfy the affordable housing obligation set forth in Section 3.3(ii) above by constructing or converting 125 units of new

LIH offsite at another Director-approved location within the City ("**Offsite Affordable Units**"), Developer or the affiliated/related entity shall have five years from the Effective Date of this Agreement to either: (i) in the case of construction, obtain a building permit and commence construction within said timeframe, and thereafter diligently pursue the construction to completion as determined by the Director in his reasonable discretion; or (ii) in the case of conversion, fully complete the conversion of the Offsite Affordable Units such that the units are ready and approved for occupancy (with the deed restriction in place as required above). Developer shall not satisfy this obligation by converting any existing housing units that are rented at or below Lower Income Housing levels (i.e., that are already affordable to any household at or below 80% AMI), even if such existing units are not deed restricted. If Developer elects to convert existing units, evidence must be provided to the Director for approval in the form of rent history demonstrating that the existing units to be converted are all above all the Lower Income Housing restricted rent levels at the time of conversion.

3.3.2 For any avoidance of doubt, if Developer or its related/affiliated entity elects to construct the Offsite Affordable Units within "Cell 1" of the District at South Bay Specific Plan area, then the 125 Offsite Affordable Units must be in excess of the current State Surplus Land Act requirement that 25 percent of the total number of units be constructed on that property for affordable housing. Should Developer or the related/affiliated entity elect to provide Section 3.3(ii) OffSite Affordable Units but fail to comply with any of the applicable timing requirements set forth in Section 3.3.1, then Developer or the related/affiliated entity shall, within thirty (30) days of such failure, pay the City the applicable affordable housing in lieu fee set forth in Section 3.3(iii) above.

3.3.3 If the Developer ever fails to pay the in-lieu affordable housing fee within thirty (30) days of it becoming due, whether such fee becomes due pursuant to Section 3.3(iii) or Section 3.3.2, a daily penalty of one thousand dollars ($1,000.00) shall be assessed subject to the notice and cure provisions of Section 7.2 of this Agreement.

3.3.4 The Developer shall remain fully and ultimately responsible to perform any obligation undertaken by a related/affiliated entity pursuant to this Section 3.3.

### 3.4 Senior and Veteran Housing.

3.4.1. Prior to issuance of a Certificate of Occupancy, the Developer shall prepare, submit to the City for review, and implement a veterans and senior citizen marketing and outreach program for the Project's Apartment units, subject to the prior written approval of the Director, which approval shall not be unreasonably withheld, conditioned or delayed. Developer shall exclusively market the Project's Apartment units to veterans and their families as well as senior citizens (over the age of 55) who currently reside within the City or the general South Bay area for a period of sixty (60) days prior to the units being offered for rent to the general public ("Exclusive Pre-Lease Period"). During this Exclusive Pre-Lease Period, Developer shall make best efforts to lease units to local veterans and their family members and senior citizens provided that all such applicants meet generally applicable leasing qualifications and criteria imposed by Developer. Nothing in this Agreement shall require that any of the Project Apartment units be actually occupied by local veterans or their family members. Further, nothing in this Agreement requires more than 83 of the total 1,115 units to be leased to senior citizens at a given time .

3.4.2. Commencing two years after issuance of a certificate of occupancy for the second Apartment building, Developer shall demonstrate to the City on an annual basis that at least eighty-three (83) of the Project's Apartment units are rented to senior citizens (defined as fifty-five (55) years or older) ("Project Senior Obligation"). The Developer shall demonstrate it is meeting the Project Senior Obligation by providing rental information or other form of occupancy verification confirming that seniors are renting at least 83 of the Project Apartment units. For every unit less than 83 that is not rented to a senior citizen as defined in this Section 3.4.2, Developer shall provide the City a payment equivalent to the average in place amount of an equivalent floorplan market rate unit occupied in the Project ("Project Senior Obligation Payment"). The Project Senior Obligation Payment shall be used for low income and senior housing services throughout the City.

**3.5 Apartment and Townhome Enhanced Sustainability and Environmental Benefits.** Developer shall agree to incorporate the following enhanced sustainability and environmental benefits into construction of the Apartments and Townhomes for the Project. In recognition of the enhanced environmental benefits provided by the Project Apartments and Townhomes through this Section 3.5, the City shall subject the Project Apartments and Townhomes to the 2019 California Building Standards Code as applicable to and/or adopted by the City pursuant to CMC Article VIII, provided Developer submits a conceptual design package to the City's Building & Safety Department on the City Building & Safety Department's Online Plan check (BSOP) website prior to January 1, 2023. The conceptual design package shall consist of a schematic set of development and design plans for all disciplines with sufficient detail for the City to undertake zoning compliance review, but shall not be required to include landscaping, structural, energy, accessibility, mechanical, electrical and/or plumbing related plans and design, provided it is within the City's legal discretion to deem such submittal complete as necessary to facilitate such grandfathering under applicable state and local law. A full set of construction plans with all disciplines shall be submitted prior to January 1, 2024 for the Apartments and Townhomes. If the Building & Safety plan check application validity period of one year plus the two six-month extension periods thereafter expire prior to issuance of the required permits/approvals (expected to include, without limitation, rough grading approval and building pad/foundation permits), then the plans will expire and will be required to meet the code in effect at the time of such expiration, and new plan check fees will be required.

a. **Photovoltaic Panels.** Developer shall incorporate approximately 35,000 square feet (total) photovoltaic panels located on the rooftop of the Project parking structure for the Apartments and shall provide conduit and wiring for an additional twenty thousand (20,000) square feet of Apartment building rooftop to accommodate potential future solar panel installation.

b. **Enhanced Electric Vehicle Charging Stations ("EVCS").** Developer shall equip a total of fifty percent (50%) of the Project parking spaces with an EVCS benefit, as follows: (a) fifteen percent (15%) of the total Project parking spaces shall be full EVCS, with EV chargers installed; and (b) thirty-five percent (35%) of the total Project parking spaces shall have conduit and wiring to allow for future EVCS installation. The electrical panel for all buildings shall be designed such that it can accommodate full EVCS for 50% of parking spaces for the Project. EVCS spaces shall be assigned and managed in accordance with the parking management plan required per the Conditions of Approval, which may require the Developer to convert the EVCS parking spaces that are initially only provided with conduit and wiring into full EVCS parking spaces (with chargers installed) incrementally over time based on tenant need.

All Townhomes shall have 240 volt NEMA 14-50 installed in the garage. All Townhomes shall be have conduit and wiring for future solar installations.

c. **Mechanical Dwelling Unit System Efficiency Benefit.** The Project provides a mechanical dwelling unit system with a Seasonal Energy Efficiency Ratio ("SEER") of 15.

d. **Lighting Occupancy Sensors and Fenestration Energy Efficiency.** Notwithstanding any other provision of this Section 3.5, the Project shall: (i) provide state of the art occupancy sensors consistent with the California Energy Code in place at the time the time of Project permitting; and (ii) purchase and install windows and exterior façade materials consistent with the California Energy Code requirements in place at the time of Project permitting.

**3.6. Publicly Accessible, Privately Maintained Open Space.** Developer shall make the Project open space areas identified on Exhibit C attached to this Agreement ("**Public Open Space Areas**"), which total approximately 111,581 square feet, accessible to the public during the hours of 7:00 a.m. to 7:00 p.m. Developer shall be fully responsible for all maintenance, care and upkeep of the Public Open Space Areas through the life of the Project; this obligation shall survive any termination or expiration of this Agreement.

**3.7. Publicly Accessible Pedestrian Bridge.** Developer shall work with the City to design, construct and maintain a pedestrian bridge at Developer's sole cost and conceptually identified on Exhibit D attached to this Agreement, subject to City Engineer approval, to allow for pedestrian and bicycle access over the Torrance Lateral Flood Control Channel (BI 1232–Line A) from the Project site to the District at South Bay Specific Plan area. Developer shall also be responsible to pay for any permits, air rights, and all other costs associated with delivering a functional and complete bridge. All applicable codes including but not limited to building and fire codes shall be adhered to. The pedestrian bridge shall be accessible to the public at all times. Construction of the pedestrian bridge is contingent upon the Parties' ability to obtain all necessary approvals, easements, rights, and permits from any Federal, State or local governmental agency with permitting or approval authority over the pedestrian bridge, including but not limited to the Los Angeles County Flood Control District and the United States Army Corps of Engineers. Developer shall make, and shall demonstrate to the Director upon request, reasonable best efforts to obtain the required approvals and permits and to construct the pedestrian bridge prior to issuance of the first building permit for the Project, or within five years of the Effective Date of this Agreement, whichever is later. If, by such time, the Parties have made substantial progress toward securing the necessary approvals and permits or with construction of the bridge, as determined by the Director, then the Director may grant extensions of time as may be necessary to allow for completion of securing the necessary approvals and permits and/or completion of construction of the bridge, provided Director determines for each extension that Developer has been diligently pursuing securing the necessary permits and approvals and completion of construction without delay and is continuing to make substantial progress. If the Parties are unable to obtain all necessary approvals and permits in order to construct the pedestrian bridge or fail to complete construction of the bridge timely in accordance with this provision, then the Developer (or its nonprofit entity described in Section 3.1, subject to the requirements of Section 3.2), prior to issuance of the first building permit for the Project, or within five years of the Effective Date of this Agreement, whichever is later, constructed as part of the Project, shall make a cash

contribution of four million dollars ($4,000,000) to City, to be used for the purpose of providing an enhanced art walk leading from the Project site to the District at South Bay Specific Plan and/or other making other pedestrian improvements in the vicinity of the Project site as determined by the City. This sum shall be additional to the Development Agreement Fee. If the Developer ever fails to pay the $4,000,000 within thirty (30) days of it becoming due, then subject to the notice and cure provisions of Section 7.2 of this Agreement, liquidated damages in the amount of one thousand dollars ($1,000.00) per day that any portion of the payment is outstanding shall be assessed, as the Parties agree that is such event the determination of actual damages for the delay in performance of this obligation would be extremely difficult or impractical to determine. The Developer shall be responsible to reimburse the City for all costs of the maintenance, care, and upkeep of the pedestrian bridge through the life of the Project; this obligation shall survive any termination or expiration of this Agreement.

**3.8 Restaurant and Kitchen Timing.** Developer agrees that the restaurant space to be included in the Project's approximately 10,000 square feet (including outdoor/patio space) of ground floor commercial area must include a fully built out kitchen prior to issuance of a certificate of occupancy for the last residential building constructed within the Project.

**3.9 Art Benefit.** Prior to issuance of the first building permit for the Townhomes and prior to issuance of building permits for each of the two Apartment buildings, the Developer shall pay a public art fee equal to one percent (1%) of the total building valuation for all Townhomes and each of the two Apartment buildings (i.e., all Project buildings) as determined by the City's Building Official in accordance with the Marshall-Swift Valuation Guide per the City Building Official's standard practice ("**Project Art Fee**").

In lieu of paying the Project Art Fee, Developer may incorporate on-site art, including but not limited to art within the exterior north side of the Project facing the 405 freeway, to the satisfaction of the Director, in which case Developer shall submit a Project art plan, valuation, and implementation plan to the Director prior to issuance of the first Project building permit. Unless otherwise approved by the Director pursuant to the art implementation plan, Developer's on-site art which corresponds to a particular building shall be installed prior to issuance of a certificate of occupancy for the corresponding building, and art that does not correspond to any particular building shall be installed within six months following issuance of the certificate of occupancy for the first Apartment building constructed as part of the Project. Individual art valuations shall be submitted for each Project building prior to issuance of building permits for the respective buildings. Should the value of Developer's onsite art be less than one percent (1%) of the total building valuation for the entire Project as described above, then Developer shall pay the City the difference in its entirety prior to issuance of the certificate of occupancy for the 150th Townhome constructed as part of the Project.

**3.10 Traffic Signal.** Developer shall fund and install a new traffic signal at the Project entry location on Avalon Boulevard between the I-405 interchange and 213th Street, in accordance with plans approved by the City's Director of Public Works or his or her designee, which shall include approval of the projected costs. Developer will be eligible for reimbursement of up to 50% of the approved costs of the new traffic signal by City upon completion of the comprehensive redevelopment of the Kott site (located to the east of the Property, north of E. 213th St. and east of Avalon Blvd. to the I-405 freeway). Developer shall submit plans for the traffic signal with an

estimate of the cost prior to issuance of the first building permit issued for the Project and shall complete installation prior to issuance of the first Project certificate of occupancy.

**3.11 Carson and Avalon 405 Interchange Landscaping Improvement.** Prior to issuance of the certificate of occupancy for the second Apartment building or any Townhome, Developer or Developer's Nonprofit identified in Section 3.2 shall provide up to one million dollars ($1,000,000.00) in matching funds ("Matching Funds") for landscaping upgrades and improvements for the I-405 interchange at Carson Street and Avalon Boulevard ("I-405 Interchange Upgrades"). Prior to receiving the Matching Funds, the City must provide Developer a concept plan detailing how the I-405 Interchange Upgrades will be implemented, a budget and evidence that the City is in possession dedicated funds equal or greater than the Matching Funds.

3.12 **Purple Pipe.** Developer shall install recycled water purple pipe onsite and shall coordinate the tie-in of the onsite recycled water purple pipe infrastructure for future connections to offsite purple pipe infrastructure extensions as such connections become available. Notwithstanding any other provision of this Agreement, this Section 3.12 shall supersede and prevail over the Condition of Approval of VTTM No. 83157 pertaining to purple pipe to the extent of a conflict.

## 4. DEVELOPMENT OF THE PROPERTY.

**4.1 Scope of Developer's Vested Right.** Subject to the Reservation of Authority set forth in Article 5, Developer shall have the vested right to develop the Project in accordance with and to the full extent permitted under the Applicable Laws and this Agreement ("**Developer's Vested Right**").

**4.2 Effect of Agreement on Land Use Regulations.** Except as otherwise provided under the terms of this Agreement, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to the Development of the Property, shall be as set forth in the Existing Land Use Regulations which were in full force and effect as of the Effective Date of this Agreement, subject to the terms of this Agreement.

**4.3 Rights under State and Federal Law.** Developer shall retain all rights it has under state and federal law, including, but not limited to, Developer's rights under Government Code Section 65865.2, which provides that subsequent discretionary actions shall not prevent development of the Property for the uses and to the density or intensity of development set forth in the Project Development Approvals.

**4.4 Apportionment.** Developer shall have the right to apportion the uses, intensities, and densities of the Project between itself and any subsequent owners, upon the sale, transfer, or assignment of all or any portion of the Property, so long as such apportionment is consistent with the Applicable Laws and this Agreement.

**4.5 Lesser Development.** Except as otherwise provided in this Agreement: without amending this Agreement, Developer shall have the right to elect to develop and construct upon all or any portion of the Property a Project of lesser height or building size than

that permitted by the Project Development Approvals provided that the Project otherwise complies with the Project Development Approvals and this Agreement.

**4.6 Project Development Approvals; Subsequent Development Approvals.** The Project Development Approvals for the Project may require the processing of Subsequent Development Approvals. Subject to the provisions of Section 4.7 below, the City shall accept for processing, review and action all applications for Subsequent Development Approvals, and such applications shall be processed in the normal manner for processing such matters in accordance with the Existing Land Use Regulations. The parties acknowledge that subject to the Existing Land Use Regulations, under no circumstances shall City be obligated in any manner to approve any Subsequent Development Approval, or to approve any Subsequent Development Approval with or without any particular condition. However, unless otherwise requested by Developer, City shall not, without good cause, amend or rescind any Subsequent Development Approvals respecting the Property after such approvals have been granted by the City. Processing of Subsequent Development Approvals or changes in the Project Development Approvals made pursuant to Developer's application shall not require an amendment to this Agreement. This Agreement shall not prevent City from denying or conditionally approving any application for a Subsequent Development Approval on the basis of the Existing Land Use Regulations.

**4.7 Role of Project Development Approvals.** Except as provided within this Agreement, the Project Development Approvals shall exclusively control the uses of the Property, the density or intensity of use, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes and the design, improvement, and construction standards and specifications applicable to the Project. Pursuant to Government Code Section 66452.6, the term of any tentative map for the Property or any portion thereof, if any, filed within the term of this Agreement shall automatically be extended for the term of this Agreement, as amended by the Project Development Approvals. In addition, Developer shall have the right to commence Project construction of both Apartment buildings within the Project prior to the recordation of an approved final subdivision map No. 83157. However, the approved final subdivision map must be recorded prior to occurrence of either of the following: (i) issuance of any building permits for the Townhomes; (ii) issuance of a certificate of occupancy for either of the Apartment buildings. Neither the Apartment lots nor the Apartment buildings may be individually sold prior recordation of the approved final subdivision map No. 83157. Any tentative map prepared for the Project subdivision will comply with Government Code Section 66473.7.

**4.8 Moratorium.** Notwithstanding any other provision of this Agreement, no future amendment of any existing City ordinance or resolution or any subsequent ordinance, resolution or moratorium, enacted either by the City Council or by voter approved initiative, that purports to impose or result in a limitation on the Project, imposed by City, shall apply to govern, or regulate the Project or development or use of the Property during the Term. In the event of any such subsequent action by City, Developer shall continue to be entitled to apply for and receive Development Approvals in accordance with the Existing Land Use Regulations, subject only to the exercise of the City's Reservation of Authority set forth herein.

**4.9 Maintaining Property.** The Property must at all times be maintained and generally kept in a clean condition, in accordance with the CMC and the City's code enforcement regulations.

## 5. CITY'S RESERVATION OF AUTHORITY.

Notwithstanding Developer's Vested Right, the Project is subject to the following Subsequent Land Use Regulations:

**5.1 City's Discretion Under Applicable Laws.** In considering future applications, if any, for a Subsequent Development Approval, the City may exercise its regulatory discretion to the extent permitted by the Applicable Laws.

**5.2 Uniform Codes.** Changes adopted by the International Conference of Building Officials, or other similar body, as part of the then most current versions of the Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, or National Electrical Code, or other such Uniform Codes, and also adopted by City as Subsequent Land Use Regulations, but only if: (i) the Project is not subjected to the 2019 codes pursuant to Section 3.5 of this Agreement; and (ii) such changes are applicable City-wide.

**5.3 Emergencies.** Emergency rules, regulations, laws, and ordinances within the City's police power that would limit the exercise of Developer's Vested Right ("**Conflicting Emergency Regulations**"), provided that the Conflicting Emergency Regulations:

a. Result from a sudden, unexpected emergency declared by the President of the United States, Governor of California, County Board of Supervisors and applicable to incorporated areas, including the City, or the City Council;

b. Address a clear and imminent danger, with no effective reasonable alternative available that would have a lesser adverse effect on Developer's Vested Right;

c. Do not primarily or disproportionately impact the development of the Project; and

d. Are based upon findings of necessity established by a preponderance of the evidence at a public hearing.

**5.4 Laws of Other Jurisdictions.** Other public agencies not subject to control by City may possess authority to regulate aspects of the Project. This Agreement does not limit the authority of such other public agencies. Therefore:

a. Federal, state, county, and multi-jurisdictional laws and regulations (the "**Additional Regulations**"), including regional impact fees, which City is required to enforce against the Property or the Project, except if the Additional Regulations are for the purpose of mitigating a significant or potentially significant impact that has already been mitigated pursuant to the Project's EIR.

b. If an Additional Regulation is enacted after the Effective Date and prevents or precludes compliance with one or more of the provisions of this Agreement, those provisions shall be modified or suspended as may be necessary to comply with the Additional Regulation. In that event, this

Agreement shall remain in full force and effect to the extent it is not inconsistent with the Additional Regulation and to the extent that the suspension or modification necessitated by the Additional Regulation does not deny one of the Parties its primary benefits under this Agreement.

c. Developer shall apply in a timely manner for such other permits and approvals that are lawfully required by other governmental or quasi-governmental agencies in order to allow the Project to be constructed. City shall provide Developer reasonable cooperation in Developer's efforts to obtain such permits and approvals. The Parties shall cooperate and use reasonable efforts in coordinating the implementation of the Development with other public agencies, if any, having jurisdiction over the Property or the Project.

**5.5 Modification or Suspension by Federal or State Laws.** In the event that Federal or State laws or regulations, enacted after the Effective Date of this Agreement, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such Federal or State laws or regulations, and this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provision impractical to enforce.

**5.6 Employment Outreach for Local Residents.** A goal of the City with respect to this Project and other major projects within the City is to foster employment opportunities for Carson residents. To that end, Developer covenants that with respect to the construction, operation and maintenance of the Project, the Developer shall make reasonable efforts to cause all solicitations for full or part-time, new or replacement, employment relating to the construction, operation and maintenance of the Project to be advertised in such a manner as to target local City residents and shall make other reasonable efforts at local employment outreach as the City shall approve. Developer shall also notify the City of jobs available at the Project such that the City may inform City residents of job availability at the Project. Developer will inform its purchasers and lessees of the provisions of these requirements. Nothing in this paragraph shall require Developer to offer employment to individuals who are not otherwise qualified for such employment. Without limiting the generality of the foregoing, the provisions of this Section 5.6 are not intended, and shall not be construed, to benefit or be enforceable by any person whatsoever other than City.

**5.7 Prevailing Wages.** Developer's cost of developing the Project and constructing all of the on-site and off-site improvements, if any, at or about the Property required to be constructed for the Project shall be borne by Developer. Developer is aware of the laws of the State governing the payment of prevailing wages on public projects and will comply with same and will defend, hold harmless, and indemnify City in the event Developer fails to do so. As the City is not providing any direct or indirect financial assistance to Developer, the Project should not be considered to be a "public work" "paid for in whole or in part out of public funds," as described in California Labor Code Section 1720. Accordingly, it is believed by the parties that Developer is not required to pay prevailing wages in connection with any aspect of the Development or the construction of the Project. However, to the extent that (contrary to the parties' intent) it is determined that Developer was required to pay prevailing wage and has not

paid prevailing wages for any portion of the Project, Developer shall defend, indemnify, and hold the City (which, for purposes of this section, shall include its related agencies, officers, employees, agents and assigns) harmless from and against any and all increase in construction costs, or other liability, loss, damage, costs, or expenses (including reasonable attorneys' fees and court costs) arising from or as a result of any action or determination that Developer failed to pay prevailing wages in connection with the construction of the Project. City shall reasonably cooperate with Developer regarding any action by Developer hereunder challenging any determination that the Project is subject to the payment of prevailing wages. Notwithstanding the foregoing, the City retains the right to settle or abandon the matter without Developer's consent as to the City's liabilities or rights only, but should it do so, City shall waive the indemnification herein provided such waiver occurs prior to the issuance of any judgment in the matter.

**5.8 Fees, Taxes, and Assessments.**

a. **Processing Fees.** The Developer shall pay all processing fees and charges of every kind and nature imposed by City to cover the estimated actual costs to City of processing applications for Project Development Approvals, including but not limited to, City Attorney fees incurred by City for the review, preparation and negotiation of the Entitlements, inclusive of this Agreement, at a rate of $495 per hour for partners and $395 per hour for associates, and for monitoring compliance with any Project Development Approvals granted or issued, in accordance with the Reimbursement and Indemnification Agreement entered into by and between the Parties effective December 16, 2019, and as amended and restated pursuant to the First Amended Reimbursement and Indemnification Agreement entered into by and between the Parties effective June 1, 2022, and as the same may be amended from time to time by mutual agreement of the Parties.

b. **Permit Fees.** Except as expressly provided in this Agreement, Developer shall pay all standard permit fees and other fees and charges which are standard and uniformly-applied to similar projects in the City.

c. **Master Community Facilities District.** On November 7, 2018, the City formed a Master CFD entitled City of Carson Community Facilities District No. 2018-01 (Maintenance and Services) (the "**Master CFD**") for the purpose of funding the maintenance of public infrastructure within the area of the Master CFD which is within the City's jurisdictional boundaries (the "**Services**"). In light of the substantial Developer contributions towards infrastructure, parks and other public benefits as set forth in Article 3 of this Agreement secured through payment of the Development Agreement Fee, it is understood that the City will not annex the Property or the Project into the Master CFD for the life of the Project. This provision shall survive the Term of the Agreement.

d. **Development Impact Fee.** In light of the substantial Developer contributions towards infrastructure, parks and other public benefits as set forth in Article 3 of this Agreement secured through payment of the

Development Agreement Fee, it is understood that the City will not assess Development Impact Fees pursuant to Ordinance No. 19-1931. Accordingly, the Parties understand, acknowledge and agree that no credits or reimbursements will be available to Developer pursuant to Ordinance No. 19-1931 or any provision of the CMC (as may be amended) to offset, reduce or refund any portion of the Development Agreement Fee.

e. **General Charges**. Nothing herein shall prohibit the application of the following, if lawfully imposed upon the Property, excluding any existing or future CFD:

(i) Additional Taxes, Fee, and Charges. Developer, or Developer's Project occupants, shall pay all normal and customary taxes, fees, and charges applicable to all permits necessary for the Project, and any taxes, fees, and charges hereafter imposed by City, which are standard and uniformly-applied to similar properties in the City.

(ii) Developer , or Developer's Project occupants, shall be obligated to pay any fees or taxes, and increases thereof, imposed on a City-wide basis such as business license fees or taxes, sales or use taxes, transient occupancy taxes, utility taxes, and public safety taxes;

(iii) Developer, or Developer's Project occupants, shall be obligated to pay any fees imposed pursuant to any Uniform Code.

(iv) Developer, or Developer's Project occupants, shall be obligated to pay any utility fees and charges, including amended rates thereof, for City services such as electrical utility charges, water rates, and sewer rates.

**5.9 Inconsistencies.** It is expressly agreed that in the event of any inconsistency between the provisions or conditions of the Existing Land Use Regulations or Conditions of Approval and the provisions of this Agreement, the provisions of this Agreement shall govern. The conditions of such Existing Land Use Regulations and Conditions of Approval shall be interpreted insofar as possible to prevent such inconsistency, and in the event this Agreement is silent concerning an issue, the conditions of the Existing Land Use Regulations and Conditions of Approval shall govern. As between several instruments and regulations governing the Project, in the event of a clear and explicit conflict which cannot be resolved through interpretation, the following interpretive priorities shall apply: (i) the terms of this Agreement shall prevail over the provisions of the Existing Land Use Regulations and Project Development Approvals except where the Conditions of Approval are more restrictive, in which event the Conditions of Approval shall prevail; (ii) the terms of the Project Development Approvals shall prevail over the terms of the Existing Land Use Regulations, except where such Existing Land Use Regulations are legally preemptive; and (iii) the terms of the Project Development Approvals shall take priority over the provisions of the CEQA instruments and EIR approved in conjunction with the Project, except where the EIR is legally preemptive.

## 6. ANNUAL REVIEW.

**6.1 Timing of Annual Review.** Pursuant to Government Code Section 65865.1, at least once during every twelve (12) month period of the Term, City shall review the good faith compliance of Developer with the terms of this Agreement ("**Annual Review**"). No failure on the part of City to conduct or complete an Annual Review as provided herein shall have any impact on the validity of this Agreement, nor shall it be deemed a breach on the part of Developer. The cost of the Annual Review shall be borne by Developer and Developer shall pay the actual and reasonable costs incurred by the City for such review.

**6.2 Special Review.** The City Council may, in its sole and absolute discretion, order a special review of compliance with this Agreement at any time at City's sole cost ("**Special Review**"). Developer shall cooperate with the City in the conduct of such Special Reviews.

**6.3 Standards for Annual Review.** During the Annual Review, Developer shall demonstrate good faith compliance with the terms of this Agreement. "**Good faith compliance**" shall be established if Developer is in substantial compliance with the material terms and conditions of this Agreement.

**6.4 Procedure.** Each party shall have a reasonable opportunity to assert matters which it believes have not been undertaken in accordance with the Agreement, to explain the basis for such assertion, and to receive from the other party a justification of its position on such matters. The procedure for an Annual Review or Special Review shall be as follows:

a. As part of either an Annual Review or Special Review, within ten (10) days of a request for information by the City, the Developer shall deliver to the City all information and supporting documents reasonably requested by City (i) regarding the Developer's performance under this Agreement demonstrating that the Developer has complied in good faith with the terms of this Agreement, and (ii) as required by the Existing Land Use Regulations.

b. The City Manager, or his/her designee, shall prepare and submit to Developer a written report on the performance of this Agreement and identify any perceived deficiencies in Developer's performance of this Agreement. The Developer may submit written responses to the report and Developer's written response shall be included in the City Manager's report. If the City Manager determines that the Developer has substantially complied with the terms and conditions of this Agreement, the Annual or Special Review shall be concluded.

c. If any deficiencies are noted, or if requested by a Councilmember, a public hearing shall be held before the City Council at which the Council will review the City Manager's report. The report to Council shall be made at a regularly-scheduled City Council meeting occurring as soon as possible, subject to the requirements of the Brown Act, after the commencement of the Annual or Special Review process outlined in this Section 6.4. If the City Council finds and determines, based on substantial evidence, that the

Developer has not substantially complied with the terms and conditions of this Agreement for the period under review, the City may declare a default by the Developer in accordance with Article 7.

d. Neither party hereto shall be deemed in breach if the reason for non-compliance is due to a "force majeure" as defined in, and subject to the provisions of, Section 13.11.

**6.5 Certificate of Agreement Compliance.** If, at the conclusion of an Annual Review or a Special Review, Developer is found to be in compliance with this Agreement, City shall, upon written request by Developer, issue a Certificate of Agreement Compliance ("**Certificate**") to Developer stating that after the most recent Annual Review or Special Review and based upon the information known or made known to the City Manager, Planning Commission, and City Council that (i) this Agreement remains in effect and (ii) Developer is in compliance. The Certificate, whether issued after an Annual Review or Special Review, shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance. Developer shall at its cost record the Certificate with the County Recorder. Additionally, Developer may at any time request from the City a Certificate stating, in addition to the foregoing, which obligations under this Agreement have been fully satisfied with respect to the Property, or any lot or parcel within the Property.

**6.6 Review Process Not a Prerequisite to Declaring a Default.** Neither the Annual Review nor Special Review procedure is a prerequisite to either party declaring a default and initiating the default and cure procedure in Article 7. In other words, either party may declare a default at any time without first undertaking the Annual Review or Special Review process.

**6.7 Public Hearings.** The public hearing prescribed by Section 6.4 is independent of, and in addition to, any further hearing procedures relating to defaults and remedies prescribed in Article 7 below. Thus, if the City Council finds that the Developer has not substantially complied with the terms and conditions of this Agreement as part of a review process pursuant to Section 6.4 and determines to declare a default, the City Council is still required to follow the notice/cure process (Section 7.2) and the termination hearing process (Section 7.4) before terminating this Agreement.

## 7. DEFAULTS AND REMEDIES.

**7.1 Remedies Available.** The parties acknowledge and agree that other than the termination of this Agreement pursuant to Article 7, specific performance, injunctive and declaratory relief are the only remedies available for the enforcement of this Agreement and knowingly, intelligently, and willingly waive any and all other remedies otherwise available in law or equity. Accordingly, and not by way of limitation, and except as otherwise provided in this Agreement, Developer shall not be entitled to any money damages from City by reason of any default under this Agreement. Further, Developer shall not bring an action against City nor obtain any judgment for damages for a regulatory taking, inverse condemnation, unreasonable exactions, reduction in value of property, delay in undertaking any action, or asserting any other liability for any matter or for any cause which existed or which the Developer knew of or should have known of prior to the time of entering into this Agreement, Developer's sole remedies being as specifically provided above. Developer acknowledges that such remedies are adequate to

protect Developer's interest hereunder and the waiver made herein is made in consideration of the obligations assumed by the City hereunder.

**7.2 Declaration of Default & Opportunity to Cure.**

a. Rights of Non-Defaulting Party after Default. The parties acknowledge that both parties shall have hereunder all legal and equitable remedies as provided by law following the occurrence of a default or to enforce any covenant or agreement herein except as provided in Section 7.1. Before this Agreement may be terminated or action may be taken to obtain judicial relief the party seeking relief ("**Non-Defaulting Party**") shall comply with the notice and cure provisions of this Section 7.2.

b. Notice and Opportunity to Cure. A Non-Defaulting Party in its discretion may elect to declare a default under this Agreement in accordance with the procedures hereinafter set forth for any failure or breach of the other party ("**Defaulting Party**") to perform any material duty or obligation of the Defaulting Party under the terms of this Agreement. However, the Non-Defaulting Party must provide written notice to the Defaulting Party setting forth the nature of the breach or failure and the actions, if any, required by the Defaulting Party to cure such breach or failure (the "**Default Notice**"). The Defaulting Party shall be deemed in Default under this Agreement, if the breach or failure can be cured, but the Defaulting Party has failed to take such actions and cure such default within thirty (30) days after the date of such notice or ten (10) days for monetary defaults (or such lesser time as may be specifically provided in this Agreement). However, if such non-monetary Default cannot be cured within such thirty (30) day period, and if and, as long as the Defaulting Party does each of the following:

(i) Notifies the Non-Defaulting Party in writing with a reasonable explanation as to the reasons the asserted default is not curable within the thirty (30) day period;

(ii) Notifies the Non-Defaulting Party of the Defaulting Party's proposed cause of action to cure the default;

(iii) Promptly commences to cure the default within the thirty (30) day period;

(iv) Makes periodic reports to the Non-Defaulting Party as to the progress of the program of cure; and

(v) Diligently prosecutes such cure to completion.

Then the Defaulting Party shall not be deemed in breach of this Agreement.

**7.3 Termination Notice.** Upon receiving a Default Notice, should the Defaulting Party fail to timely cure any default, or fail to diligently pursue such cure as prescribed above, the Non-Defaulting Party may seek termination of this Agreement, in which case the Non-

Defaulting Party shall provide the Defaulting Party with a written notice of intent to terminate this Agreement ("**Termination Notice**"). The Termination Notice shall state that the Non-Defaulting Party will elect to terminate this Agreement within thirty (30) days and state the reasons therefor (including a copy of any specific charges of default or a copy of the Default Notice) and a description of the evidence upon which the decision to terminate is based. Once the Termination Notice has been issued, the Non-Defaulting Party's election to terminate this Agreement will only be rescinded if so determined by the City Council pursuant to Section 7.4.

**7.4 Hearing Opportunity Prior to Termination.** If Developer is the Defaulting Party pursuant to Section 7.3, then the City's Termination Notice to Developer shall additionally specify that Developer has the right to a hearing prior to the City's termination of any Agreements ("**Termination Hearing**"). The Termination Hearing shall be scheduled as an open public hearing item at a regularly-scheduled City Council meeting within thirty (30) days of the Termination Notice, subject to any legal requirements including but not limited to the Ralph M. Brown Act, Government Code Sections 54950-54963. At said Termination Hearing, Developer shall have the right to present evidence to demonstrate that it is not in default and to rebut any evidence presented in favor of termination. Based upon substantial evidence presented at the Termination Hearing, the Council may, by adopted resolution, act as follows:

a. Decide to terminate this Agreement; or

b. Determine that Developer is innocent of a default and, accordingly, dismiss the Termination Notice and any charges of default; or

c. Impose conditions on a finding of default and a time for cure, such that Developer's fulfillment of said conditions will waive or cure any default.

Findings of a default or a conditional default must be based upon substantial evidence supporting the following two findings: (i) that a default in fact occurred and has continued to exist without timely cure, and (ii) that such default has caused or will cause a material breach of this Agreement and/or a substantial negative impact upon public health, safety and welfare, the environment, or such other interests that the City and public may have in the Project.

**7.5 Rights and Duties Following Termination.** Upon the termination of this Agreement, no party shall have any further right or obligation hereunder except with respect to (i) any obligations to have been performed prior to said termination, (ii) any default in the performance of the provisions of this Agreement which has occurred prior to said termination, or (iii) the indemnification provisions of Article 8. Termination of this Agreement pursuant to this Section 7 shall automatically terminate the Project Development Approvals.

**7.6 Waiver of Breach.** By not challenging any Development Approval within ninety (90) days of the action of City enacting the same, Developer shall be deemed to have waived any claim that any condition of approval is improper or that the action, as approved, constitutes a breach of the provisions of this Agreement.

**7.7 Interest on Monetary Default.** In the event Developer fails to perform any monetary obligation under this Agreement, Developer shall pay interest thereon at the rate of six

and one-half percent (6.5%) per annum from and after the due date of said monetary obligation until payment is actually received by City.

## 8. THIRD PARTY LITIGATION.

### 8.1 Indemnity Obligations on Third-Party Claims

a. Developer hereby agrees to indemnify, defend, and hold City, its officers, agents, employees, members of its City Council and any commission, partners and representatives ("**City Indemnitees**") harmless from any and all claims, actions, suits, damages, liabilities, and any other actions or proceedings (whether legal, equitable, declaratory, administrative, or adjudicatory in nature) (collectively, "**Claims**"), asserted against City or City Indemnitees arising out of or in connection with this Agreement, including, without limitation, (i) City's approval of this Agreement and all documents related to any of the Project Development Approvals, Conditions of Approval, permits, or other entitlements for the Project and issues related thereto (including, without limitation, City's determinations regarding CEQA compliance and/or any other development incentives granted to the Project), (ii) the development of the Project, (iii) liability for damage or claims for damage for personal injury including death and claims for property damage which may arise from, or are attributable to, Developer's (or Developer's contractors, subcontractors, agents, employees or other persons acting on Developer's behalf ("**Developer's Representatives**")) performance of its obligations under this Agreement and/or the negligence or misconduct of Developer or of Developer's Representatives which relate to the Project or the Property, and (iv) Developer's failure to comply with any applicable federal, state or local law, rule, or regulation, including, but not limited to, those relating to industrial hygiene or to environmental conditions on, under or about the Property, such as (without limitation) soil and groundwater conditions.

b. The City shall provide the Developer with notice of the pendency of such Claims within ten (10) days of being served or otherwise notified of such Claims and shall request that the Developer defend such action. The Developer may utilize the City Attorney's office or use legal counsel of its choosing, but shall reimburse the City for any necessary legal cost incurred by City. In all cases, City shall have the right to utilize the City Attorney's office in any legal action. The Developer shall provide a deposit in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of litigation, including the cost of any award of attorney's fees. If the Developer fails to provide the deposit, and after compliance with the provisions of this Section 8.1, the City may abandon the action and the Developer shall pay all costs resulting therefrom and City shall have no liability to the Developer. The Developer's obligation to pay the cost of the action, including judgment, shall extend until judgment. After judgment in a trial court, the parties must mutually agree as to whether any appeal will be taken or defended. City agrees that it shall fully cooperate with the

Developer in the defense of any matter in which the Developer is defending and/or holding the City harmless.

**8.2 Hold Harmless: Developer's Construction, and Other Activities.** The Developer shall defend, save and hold the City and its elected and appointed boards, commissions, officers, agents, and employees harmless from any and all claims, costs (including attorneys' fees) and liability for any damages, personal injury or death, which may arise, directly or indirectly, from the Developer's or the Developer's agents, contractors, subcontractors, agents, or employees' Project construction activities and operations under this Agreement, whether such Project construction activities and operations be by the Developer or by any of the Developer's agents, contractors or subcontractors or by any one or more persons directly or indirectly employed by or acting as agent for the Developer or any of the Developer's agents, contractors or subcontractors. Nothing herein shall be construed to mean that the Developer shall hold the City harmless and/or defend it from any claims arising from, or alleged to arise from, the sole negligence or gross or willful misconduct of the City's officers, employees, agents, contractors of subcontractors.

**8.3 Loss and Damage.** City shall not be liable for any damage to property of Developer or of others located on the Property, nor for the loss of or damage to any property of Developer or of others by theft or otherwise. City shall not be liable for any injury or damage to persons or property resulting from fire, explosion, steam, gas, electricity, water, rain, dampness or leaks from any part of the Property or from the pipes or plumbing, or from the street, or from any environmental or soil contamination or hazard, or from any other latent or patent defect in the soil, subsurface or physical condition of the Property, or by any other cause of whatsoever nature. Nothing herein shall be construed to mean that the Developer shall bear liability for the sole negligence or gross or willful misconduct of the City's officers, employees, agents, contractors or subcontractors.

**8.4 Non-liability of City Officers and Employees.** No official, agent, contractor, or employee of the City shall be personally liable to the Developer, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Developer or to its successor, or for breach of any obligation of the terms of this Agreement.

**8.5 Conflict of Interest.** No officer or employee of the City shall have any financial interest, direct or indirect, in this Agreement nor shall any such officer or employee participate in any decision relating to this Agreement which affects the financial interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested, in violation of any state statute or regulation.

**8.6 Survival of Indemnity Obligations.** All indemnity provisions set forth in this Agreement shall survive expiration or sooner termination of this Agreement for any reason other than a default by City.

## 9. INSURANCE.

### 9.1 Types of Insurance.

a. **Public Liability Insurance.** Prior to commencement and until completion of construction of improvements by Developer on the Property, Developer

shall, at its sole cost and expense, keep or cause to be kept in force, for the mutual benefit of City and Developer, comprehensive broad form general public liability insurance against claims and liability for personal injury or death arising from the use, occupancy, disuse or condition of the Property, improvements or adjoining areas or ways, affected by such use of the Property or for property damage. Such policy shall provide protection of at least $5,000,000 for bodily injury or death to any one person, at least $5,000,000 for any one accident or occurrence, and at least $5,000,000 for property damage, and $10,000,000 in the aggregate.

b. **Worker's Compensation**. To the extent Developer and its contractors utilize employees for any portion of the Project, Developer and such contractors shall also furnish or cause to be furnished to City evidence reasonably satisfactory to it that Developer and any contractor with whom Developer has contracted for the performance of any work for which Developer is responsible hereunder carries workers' compensation insurance as required by law.

c. **Automobile Liability Insurance**. Developer shall ensure that all contractors with whom Developer has contracted for the performance of any work for which Developer is responsible hereunder maintains automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Developer arising out of or in connection with work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $5,000,000 combined single limit for each accident.

d. **Pollution Liability Insurance**. Environmental Impairment Liability Insurance shall be written on a Contractor's Pollution Liability form or other form acceptable to City providing coverage for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than $5,000,000 dollars per claim and $10,000,000 in the aggregate. All activities contemplated in this Agreement shall be specifically scheduled on the policy as "covered operations." The policy shall provide coverage for the hauling of waste from the Project site to the final disposal location, including non-owned disposal sites.

e. **Builder's Risk Insurance.** Builder's Risk (Course of Construction) insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions or provisional limit provisions. The policy must include: (1) coverage for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the project; (4) ordinance or law coverage for contingent

rebuilding, demolition, and increased costs of construction; (5) transit coverage (unless insured by the supplier or receiving contractor), with sub-limits sufficient to insure the full replacement value of any key equipment item; (6) ocean marine cargo coverage insuring any project materials or supplies, if applicable; (7) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the project site or any staging area. The City and Developer shall each be included as Loss Payee for their respective insurable interest.

f. **Professional Liability Insurance.** Professional liability insurance appropriate to the profession for any design work. This coverage may be written on a "claims made" basis, and must include coverage for contractual liability. The professional liability insurance required by this Agreement must be endorsed to be applicable to claims based upon, arising out of or related to services performed under this Agreement. The insurance must be maintained for at least 5 consecutive years following the completion of the services or the termination of this Agreement. During this additional 5-year period, Developer shall annually and upon request of the City submit written evidence of this continuous coverage.

g. **Other Insurance**. Developer may procure and maintain any insurance not required by this Agreement, but all such insurance shall be subject to all of the provisions hereof pertaining to insurance and shall be for the benefit of City and Developer. Developer shall ensure that all contractors and sub-contractors maintain the required minimum insurance coverages, or shall include the contractors and subcontractors under its insurance.

h. **Renegotiation of Policy Limits.** In the event the Developer in good faith determines and submits substantial evidence to the City that any of the foregoing policy limits or required coverage provisions are unreasonable and not consistent with the prevailing insurance market at the relevant time, the City will reconsider such policy limit(s) or required coverage provision(s) in good faith, and may, but is not required to, approve a modification to same, which approval may be given by the City Manager or designee.

**9.2 Insurance Policy Form, Sufficiency, Content, and Insurer.** All insurance required by express provisions hereof shall be carried only by responsible insurance companies licensed and admitted to do business by California, rated "A" or better in the most recent edition of Best Rating Guide, The Key Rating Guide or in the Federal Register, and only if they are of a financial category Class VIII or better, unless waived by City. All such policies shall be non-assessable and shall contain language, to the extent obtainable, to the effect that (i) any loss shall be payable notwithstanding any act of negligence of City or Developer that might otherwise result in the forfeiture of the insurance, (ii) the insurer waives the right of subrogation against City and against City's agents and representatives; (iii) the policies are primary and noncontributing with any insurance that may be carried by City; and (iv) the policies cannot be canceled or materially changed except after thirty (30) days' written notice by the insurer to City or City's designated representative. Developer shall furnish City with copies of all such policies

promptly on receipt of them or with certificates evidencing the insurance. City shall be named as an additional insured on all policies of insurance required to be procured by the terms of this Agreement, except for all insurance required by Developer's contractors, both City and Developer shall be named as an additional insured. Moreover, the insurance policy must specify that where the primary insured does not satisfy the self-insured retention, any additional insured may satisfy the self-insured retention. In the event the City's Risk Manager determines that the use, activities or condition of the Property, improvements or adjoining areas or ways, affected by such use of the Property under this Agreement creates an increased or decreased risk of loss to the City, Developer agrees that the minimum limits of the insurance policies required by Section 9.1 may be changed accordingly upon receipt of written notice from the City's Risk Manager; provided that Developer shall have the right to appeal a determination of increased coverage to the City Council of City within ten (10) days of receipt of notice from the City's Risk Manager.

**9.3 Failure to Maintain Insurance and Proof of Compliance.** Developer shall deliver to City, in the manner required for notices, copies of certificates of all insurance policies together with endorsements required hereunder together with evidence satisfactory to City of payment required for procurement and maintenance of each policy within the following time limits:

a. For insurance required above, within thirty (30 days) after the Effective Date.

b. For any renewal or replacement of a policy already in existence, at least ten (10) days before the expiration or termination of the existing policy.

c. If Developer fails or refuses to procure or maintain insurance as required hereby or fails or refuses to furnish City with required proof that that insurance has been procured and is in force and paid for, such failure or refusal shall be a default hereunder.

**9.4 Waiver of Subrogation.** Developer agrees that it shall not make any claim against, or seek to recover from City or its agents, servants, or employees, for any loss or damage to Developer or to any person or property, except as specifically provided hereunder and Developer shall give notice to any insurance carrier of the foregoing waiver of subrogation, and obtain from such carrier, a waiver of right to recovery against City, its agents and employees.

**9.5 Broader Coverages and Higher Limits.** Notwithstanding anything else herein to the contrary, if Developer maintains broader coverages and/or higher limits than the minimums shown above, the City requires and shall be entitled to the broader coverages and/or higher limits maintained by Developer.

## 10. MORTGAGEE PROTECTION.

**10.1** Except as otherwise provided by Applicable Laws and this Agreement, the Parties agree that this Agreement shall not prevent or limit Developer, in any manner, at Developer's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed, of trust or other security device securing financing with respect to the Property. City acknowledges that the lenders providing such financing may

require certain Agreement interpretations, modifications, and estoppel certificates and City agrees upon request, from time to time, to communicate and meet with Developer and representatives of such lenders to negotiate in good faith any such estoppel certificates and/or requests for interpretation or modification. Subject to compliance with applicable laws, City will not unreasonably withhold its consent to any such requested estoppel certificate, interpretation or modification provided City determines such estoppel certificate, interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the rights and privileges set forth in this Article 10.

**10.2** Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

**10.3** The Mortgagee of any Mortgage or deed of trust encumbering the Property, or any part thereof, where Mortgagee has submitted a request in writing to the City in the manner specified herein for giving notices, shall be entitled to receive written notification from City of any default by Developer in the performance of Developer's obligations under this Agreement.

**10.4** If City timely receives a request from a Mortgagee requesting a copy of any notice of default given to Developer under the terms of this Agreement, City shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to Developer. The Mortgagee shall have the right, but not the obligation, to cure the default during the period that is the longer of (i) the remaining cure period allowed such party under this Agreement, or (ii) sixty (60) days.

**10.5** Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the Mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement.

## 11. ASSIGNMENTS.

**11.1** The experience, knowledge, capability and reputation of Developer, its principals, employees and affiliates were a substantial inducement for the City to enter into this Agreement. The Developer may sell, transfer, lease or assign this Agreement, the Property, or any part thereof (such sale, transfer, lease or assignment shall be referred to as an "**Assignment**") with the prior written consent of the Community Development Director, which consent may not be unreasonably withheld, after providing reasonable documentation and evidence demonstrating that the person or entity to whom any of the rights or privileges granted herein are to be sold, transferred, leased, assigned, hypothecated, encumbered, merged, or consolidated, meets the following criteria: (i) the transferee has the financial strength and capability to perform its obligations under the Agreement, (ii) reasonably satisfactory evidence that the transferee has the experience and expertise to operate the Project, including reasonably satisfactory evidence that the transferee has experience with operations and projects with a similar scale of this Project; and (iii) reasonably satisfactory evidence that the transferee's key principals have no felony convictions. The proposed transferee shall execute and deliver to the City an assumption agreement assuming Developer's Project obligations, which assumption agreement shall be in a form approved by the City Manager and City Attorney.

**11.2 City Consideration of Requested Assignment.** The City agrees that it will not unreasonably withhold, condition, or delay approval of a request for approval of an Assignment required pursuant to this Article 11, provided that:

a. Developer delivers written notice to the City requesting that approval prior to the completion of the Assignment (the "**Consent Request**"); and

b. The Assignment is not completed until either (i) City has provided its written consent or (ii) sixty (60) days have passed after delivery by Developer to City of the Consent Request without the City having rejected the Consent Request in writing.

c. The Consent Request shall be accompanied by (i) a proposed draft of the Assignment and Assumption Agreement described in Section 11.3, in a form acceptable to the City Attorney and City Manager, and (ii) evidence regarding the proposed assignee's development and/or operational qualifications and experience and its financial commitments and resources in sufficient detail to enable the City to evaluate the proposed assignee's ability to complete the Project.

**11.3 Assignments Permitted Without City's Consent.** Notwithstanding any other provision of this Agreement, Assignments related to the following property conveyances and other transactions shall not require City consent:

a. The granting of easements or permits to facilitate construction of the Project or any public improvements.

b. The granting of easements or permits for utility purposes.

c. Transactions for financing purposes, including the grant of a deed of trust to secure the funds necessary, but not to exceed the amounts reasonably required, for land acquisition, construction, and/or permanent financing of any portion of the Project.

d. The acquisition of some or all of the Property by a Mortgagee in its capacity as a Mortgagee, such as through foreclosure or a deed in lieu of foreclosure.

e. A sale or transfer resulting from, or in connection with, a reorganization as contemplated by the provisions of the Internal Revenue Code of 1986, as amended or otherwise, in which the ownership interests of a corporation are assigned directly or by operation of law to a person or persons, firm or corporation which acquires the control of the voting capital stock of such corporation or all or substantially all of the assets of such corporation.

f. A sale or transfer between members of the same family, or transfers to a trust, testamentary or otherwise, in which the beneficiaries consist primarily of family members of the trustor, or transfers to a corporation or partnership in which the family members or shareholders of the transferor own at least

ten percent (10%) of the present equity ownership and/or at least fifty percent (50%) of the voting control of Developer.

g. If Developer is a trust, corporation, real estate investment trust, or partnership, a transfer of stock or other interests, provided there is no material change in the actual management and control of Developer.

h. Transactions with any member, partner, officer, employee, or affiliate of Developer or any trust or family member, provided that, following the transaction, the management of Developer on the Effective Date shall, subject to normal and customary business practices and personnel changes, remain the primary Developer representative(s) for purposes of communication with the City.

**11.4 Effect of Assignment.** Unless otherwise stated within the Assignment, upon an Assignment:

a. The assignee shall be liable for the performance of all remaining obligations of Developer with respect to those portions of the Property which are transferred (the "**Transferred Property**"), but shall have no obligations with respect to any portions of the Property not conveyed (the "**Retained Property**").

b. The owner of the Retained Property shall be liable for the performance of all obligations of Developer with respect to the Retained Property, but shall have no further obligations with respect to the Transferred Property.

c. The Assignee's exercise, use, and enjoyment of the Transferred Property shall be subject to the terms of this Agreement to the same extent as if the Assignee were the Developer.

## 12. AMENDMENT AND MODIFICATION.

**12.1 Initiation of Amendment.** Either party may propose an amendment to this Agreement.

**12.2 Procedure.** Except as set forth in Section 12.4, the procedure for proposing and adopting an amendment to this Agreement shall be the same as the procedure required for entering into this Agreement in the first instance as set forth in Government Code Section 65867.

**12.3 Consent.** Except as expressly provided in this Agreement, no cancellation of or amendment to all or any provision of this Agreement shall be effective unless set forth in writing and signed by duly authorized representatives of each of the parties hereto and recorded in the Official Records of Los Angeles County.

**12.4 Administrative Minor Project Modifications.** Notwithstanding any other provision and/or condition of approval contained in any Development Approvals, including any processes set forth in Chapter 5 of the Specific Plan, Minor Modifications to this Agreement, the Project, and/or the Development plans shall be made ministerially, with the approval of the

Director. Such "**Minor Modifications**" shall be defined as any modifications to this Agreement, the Project and/or the Development plans that do not (i) change the proposed uses analyzed for the Project in the EIR or permitted for the Project in the Project Development Approvals and this Agreement, (ii) constitute a prohibited modification under Section 12.5, (iii) increase building heights within the Property in comparison to what is identified in the Project Development Approvals and this Agreement, (iv) reduce the number of parking stalls identified in the Project Development Approvals by more than five (5) percent, (v) substantially deviate from the approved architectural design, as determined by the Community Development Director in his or her reasonable discretion, and/or (vi) reduce the amount of publicly accessible open space below 111,581 square feet.

**12.5** Prohibited Modifications. Notwithstanding any provision of this Agreement or the Specific Plan, none of the following shall be permitted with respect to the Project during the Term of this Agreement:; (i) any modification to the square footage of the commercial space (10,000); (ii) any use of the commercial space other than restaurant space; or (iii) any reduction in the amount of publicly accessible open space below 111,581 square feet, except that a reduction of no more than 2.5% of the non-park open space area may be permitted if necessary based on Building Standards Code requirements as identified/required during the plan check process. No reduction to the square footage of the park (22,859 sq. ft.) shall be permitted.

**12.6 Hearing Rights Protected.** Notwithstanding the foregoing, City will process any change to this Agreement consistent with state law and will hold public hearings thereon if so required by state law and the parties expressly agree nothing herein is intended to deprive any party or person of due process of law.

**12.7 Effect of Amendment to Development Agreement.** Except as expressly set forth in writing in any such amendment, an amendment to this Agreement will not alter, affect, impair, modify, waive, or otherwise impact any other rights, duties, or obligations of either party under this Agreement.

**12.8 Timing of Development.** The California Supreme Court held in *Pardee Construction Co. v. City of Camarillo*, 37 Cal.3d 465 (1984), that failure of the parties in that case to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over the parties' agreement. It is the intent of Developer and City to cure that deficiency by expressly acknowledging and providing that any Subsequent Land Use Regulations that purports to limit over time the rate or timing of development or to alter the sequencing of development phases (whether adopted or imposed by the City Council or through the initiative or referendum process) shall not apply to the Property or the Project and shall not prevail over this Agreement. In particular, but without limiting any of the foregoing, no numerical restriction shall be placed by the City on the amount of total square feet or the number of buildings, structures, residential units that can be built each year on the Property except as expressly provided in this Agreement.

## 13. MISCELLANEOUS PROVISIONS.

**13.1 Recordation.** The City Clerk shall cause a copy of this Agreement to be recorded against the Property with the County Recorder within ten (10) calendar days after the Execution Date. The failure of the City to sign and/or record this Agreement shall not affect the validity of this Agreement.

**13.2 Notices.** Notices and correspondence required or permitted by this Agreement shall be in writing and either personally delivered or sent by registered, certified, or overnight mail or delivery service. Notices shall be deemed received upon personal delivery or on the second business day after registered, certified, or overnight mailing or delivery, or email if such email notice is acknowledged as received by the receiving party. Notices shall be addressed as follows:

To City:
City of Carson
701 East Carson Street
Carson, California 90745
Attn: Planning Manager

With copy to:
Aleshire & Wynder
18881 Von Karman Avenue, Suite 1700
Irvine, CA 92612
Fax: 949-223-1180
Attn: Sunny Soltani

To Developer:
Imperial Avalon, LLC
4276 Katella Avenue, #231
Los Alamitos, CA 90720
Attn: Darren Embry

Rand, Paster & Nelson, LLP
633 W. Fifth Street, 64th Floor
Los Angeles, CA 90071
Attn: Dave Rand

A Party may change its address by giving written notice to the other Party. Thereafter, Notices shall be addressed and transmitted to the new address.

**13.3 Estoppel Certificates.** Either Party (or a Mortgagee) may at any time deliver written notice to the other Party requesting an Estoppel Certificate stating:

a. The Agreement is in full force and effect and is a binding obligation of the Parties;

b. The Agreement has not been amended or modified or, if so amended, identifying the amendments; and

c. There are no existing defaults under the Agreement to the actual knowledge of the Party signing the Estoppel Certificate.

A Party receiving a request for an Estoppel Certificate shall provide a signed certificate to the requesting Party within thirty (30) days after receipt of the request. The City Manager may sign Estoppel Certificates on behalf of the City. An Estoppel Certificate may be relied on by assignees and Mortgagees.

**13.4 Operating Memoranda.** The provisions of this Agreement require a close degree of cooperation between City and Developer. During the Term of this Agreement, clarifications to this Agreement and the Applicable Laws may be appropriate with respect to the details of performance of the City and Developer. If and when from time to time during the Term of this Agreement, the City and Developer agree that such clarifications are necessary or appropriate, they shall effectuate such clarification through operating memoranda approved in writing by the City and Developer, which after execution, shall be attached hereto and become part of this Agreement and the same may be further clarified from time to time as necessary with future written approval by the City and Developer. Operating memoranda are mere ministerial clarifications and therefore public notices, hearings and CEQA compliance shall not be required unless otherwise provided by applicable law. The authority to enter into such operating memoranda is delegated to the Community Development Director who is hereby authorized to execute any operating memoranda hereunder without future action or approval by the City Council.

**13.5 Project as a Private Undertaking.** It is specifically understood and agreed by the Parties that the Project is a private development, that neither Party is acting as the agent of the other in any respect, and that each Party is an independent contracting entity with respect to this Agreement. The only relationship between City and Developer is that of a government entity regulating the development of property owned by a private party. City agrees that by its approval of, and entering into, this Agreement that it is not taking any action which would transform this private Development into a "public work" project, and that nothing herein shall be interpreted to convey upon Developer any benefit which would transform Developer's private project into a public work project, it being understood that this Agreement is entered into by City and Developer upon the exchange of consideration described in this Agreement, including the Recitals to this Agreement, and that City is receiving by and through this Agreement the full measure of benefit in exchange for the burdens placed on Developer by this Agreement, including but not limited to Developer's obligation to provide the public improvements set forth herein.

**13.6 Eminent Domain.** No provision of this Agreement shall be construed to limit or restrict the exercise by City of its power of eminent domain.

**13.7 Entire Agreement.** This Agreement represents the entire agreement of the Parties with respect to the subject matter of this Agreement. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

**13.8 Further Actions and Instruments.** Each of the Parties shall cooperate with and provide reasonable assistance to the other to the extent necessary to implement this Agreement.

**13.9 Severability.** If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement.

**13.10 Covenant Not To Sue.** The parties to this Agreement, and each of them, agree that this Agreement and each term hereof is legal, valid, binding, and enforceable. The parties

to this Agreement, and each of them, hereby covenant and agree that each of them will not commence, maintain, or prosecute any claim, demand, cause of action, suit, or other proceeding against any other party to this Agreement, in law or in equity, or based on any allegation or assertion in any such action, that this Agreement or any term hereof is void, invalid, or unenforceable.

**13.11 Force Majeure.** Neither Party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by earthquakes, other acts of God, fires, wars, terrorism, riots or similar hostilities, strikes, and other labor difficulties beyond the Party's control, government regulations, pandemics, government-ordered quarantine, court actions (such as restraining orders or injunctions), or other causes beyond the Party's reasonable control. If any such events shall occur, the term of this Agreement and the time for performance shall be extended for the duration of the impacts on the Project of each such event.

**13.12 Waiver.** All waivers of performance must be in a writing signed by the Party granting the waiver. Failure by a Party to insist upon the strict performance of any provision of this Agreement shall not be a waiver of future performance of the same or any other provision of this Agreement.

**13.13 Time of Essence.** Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

**13.14 Governing Law and Venue.** This Agreement shall be governed and interpreted in accordance with California law, with venue for any litigation concerning this Agreement in Los Angeles, California.

**13.15 Interpretation.** This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party or in favor of City shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

**13.16 Corporate Authority.** The person(s) executing this Agreement on behalf of each of the parties hereto represent and warrant that (i) such party, if not an individual, is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other agreement to which such party is bound.

**13.17 Attorneys' Fees.** If either party to this Agreement is required to initiate or defend litigation against the other party, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorneys' fees. Attorneys' fees shall include attorneys' fees on any appeal, and, in addition, a party entitled to attorney's fees shall be entitled to all other reasonable costs for investigating such action, taking depositions and discovery and all other necessary costs the court allows which are incurred in such litigation. All such fees shall be deemed to have accrued on commencement of such action and shall be enforceable whether or not such action is prosecuted to a final judgment.

**13.18 Recitals.** The recitals in this Agreement constitute part of this Agreement and each party shall be entitled to rely on the truth and accuracy of each recital as an inducement to enter into this Agreement.

**13.19 No Brokers.** City and Developer represent and warrant to the other that neither has employed any broker and/or finder to represent its interest in this transaction. Each party agrees to indemnify and hold the other free and harmless from and against any and all liability, loss, cost, or expense (including court costs and reasonable attorney's fees) in any manner connected with a claim asserted by any individual or entity for any commission or finder's fee in connection with this Agreement arising out of agreements by the indemnifying party to pay any commission or finder's fee.

**13.20 Joint and Several Liability.** In the event Developer should sell, transfer, lease or assign this Agreement, the Property, or any part thereof, Developer shall bear ultimate responsibility for all obligations, conditions, and restrictions set forth under this Agreement, it being understood that both Developer and any transferee, assignee, or lessee shall be jointly and severally liable.

**13.21 Compliance with Laws.** Developer must comply with all applicable provisions of federal, state and local laws and regulations, including the City's Municipal Code.

**13.22 Counterparts.** This Agreement may be executed by the Parties in counterparts, which together shall have the same effect as if each of the Parties had executed the same instrument.

[SIGNATURES ON FOLLOWING PAGE(S)]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first set forth above.

CITY

CITY OF CARSON a municipal corporation

Lula Davis-Holmes, Mayor

ATTEST

Dr. Khaleah K. Bradshaw, City Clerk

APPROVED AS TO FORM
ALESHIRE & WYNDER, LLP

Sunny K. Soltani, City Attorney

DEVELOPER

IMPERIAL AVALON, LLC, a California limited liability company

By:_____
Name: Jason Illouz
Title: manager

By:_____
Name:
Title:

**If Developer is a limited liability company, any one of the following options will satisfy City's signature requirements pursuant to the Corporations Code. Option A: One signature required from each of the following groups: 1) Chairman of the Board, President or any Vice President; and 2) Secretary, any Assistant Secretary, Chief Financial Officer or any Assistant Treasurer. Option B: Signatures required from two managers unless the LLC is managed by one manager per its articles of organization, in which case only one signature from that manager is required. Option C: One signature required from any member unless the LLC is manager-managed per its articles of organization. Option D: One signature required from any manager if the LLC is manager-managed per its articles of organization. DEVELOPER'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BYLAWS, ARTICLES OF ORGANIZATION, OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.**

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first set forth above.

CITY

CITY OF CARSON a municipal corporation

Lula Davis-Holmes, Mayor

ATTEST

Dr. Khaleah K. Bradshaw, City Clerk

APPROVED AS TO FORM
ALESHIRE & WYNDER, LLP

Sunny K. Soltani, City Attorney

DEVELOPER

IMPERIAL AVALON, LLC, a California limited liability company

By:_____
Name:
Title:

By:_____
Name:
Title:

**If Developer is a limited liability company, any one of the following options will satisfy City's signature requirements pursuant to the Corporations Code. Option A: One signature required from each of the following groups: 1) Chairman of the Board, President or any Vice President; and 2) Secretary, any Assistant Secretary, Chief Financial Officer or any Assistant Treasurer. Option B: Signatures required from two managers unless the LLC is managed by one manager per its articles of organization, in which case only one signature from that manager is required. Option C: One signature required from any member unless the LLC is manager-managed per its articles of organization. Option D: One signature required from any manager if the LLC is manager-managed per its articles of organization. DEVELOPER'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BYLAWS, ARTICLES OF ORGANIZATION, OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.**

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT** **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of Los Angeles )

On Nov. 16, 2023 before me, Joy Simarago, Notary Public,
*Date* *Here Insert Name and Title of the Officer*

personally appeared Lula Mae Davis-Holmes
*Name(s) of Signer(s)*

,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that ~~he~~/she/~~they~~ executed the same in ~~his~~/her/~~their~~ authorized capacity(~~ies~~), and that by ~~his~~/her/~~their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

JOY SIMARAGO
Notary Public - California
Los Angeles County
Commission # 2428866
My Comm. Expires Dec 2, 2026

Signature Joy Simarago
*Signature of Notary Public*

*Place Notary Seal Above*

***OPTIONAL***

*Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.*

**Description of Attached Document**
Title or Type of Document: Development Agreement Document Date: Nov. 14, 2023
Number of Pages: 48 including this sheet Signer(s) Other Than Named Above: 1) Dr. Khaleah K. Bradshaw 2) Sunny K. Soltani 3) Jason Iloulian

**Capacity(ies) Claimed by Signer(s)**

| Signer's Name: Lula Mae Davis-Holmes | Signer's Name: |
|---|---|
| ☐ Corporate Officer — Title(s): | ☐ Corporate Officer — Title(s): |
| ☐ Partner — ☐ Limited ☐ General | ☐ Partner — ☐ Limited ☐ General |
| ☑ Individual ☐ Attorney in Fact | ☐ Individual ☐ Attorney in Fact |
| ☐ Trustee ☐ Guardian or Conservator | ☐ Trustee ☐ Guardian or Conservator |
| ☐ Other: | ☐ Other: |
| Signer Is Representing: City of Carson | Signer Is Representing: |

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IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first set forth above.

CITY

CITY OF CARSON a municipal corporation

_____

Lula Davis-Holmes, Mayor

ATTEST

_____

Dr. Khaleah K. Bradshaw, City Clerk

APPROVED AS TO FORM
ALESHIRE & WYNDER, LLP

_____

Sunny K. Soltani, City Attorney

DEVELOPER

IMPERIAL AVALON, LLC, a California limited liability company

By: _____
Name: Jason Elliott
Title: Manager

By: _____
Name:
Title:

**If Developer is a limited liability company, any one of the following options will satisfy City's signature requirements pursuant to the Corporations Code. Option A: One signature required from each of the following groups: 1) Chairman of the Board, President or any Vice President; and 2) Secretary, any Assistant Secretary, Chief Financial Officer or any Assistant Treasurer. Option B: Signatures required from two managers unless the LLC is managed by one manager per its articles of organization, in which case only one signature from that manager is required. Option C: One signature required from any member unless the LLC is manager-managed per its articles of organization. Option D: One signature required from any manager if the LLC is manager-managed per its articles of organization. DEVELOPER'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BYLAWS, ARTICLES OF ORGANIZATION, OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.**

**CALIFORNIA ACKNOWLEDGMENT** CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of Los Angeles }

On November 13th 2023 before me, Alexander N Smith, Notary Public,
*Date* *Here Insert Name and Title of the Officer*

personally appeared Jason Illovian
*Name(s) of Signer(s)*

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

ALEXANDER N. SMITH
Notary Public - California
Los Angeles County
Commission # 2353568
My Comm. Expires Apr 1, 2025

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____
*Signature of Notary Public*

*Place Notary Seal and/or Stamp Above*

**OPTIONAL**

*Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.*

**Description of Attached Document**

Title or Type of Document: _____

Document Date: _____ Number of Pages: _____

Signer(s) Other Than Named Above: _____

**Capacity(ies) Claimed by Signer(s)**

| | |
|---|---|
| Signer's Name: _____ | Signer's Name: _____ |
| ☐ Corporate Officer – Title(s): _____ | ☐ Corporate Officer – Title(s): _____ |
| ☐ Partner – ☐ Limited ☐ General | ☐ Partner – ☐ Limited ☐ General |
| ☐ Individual ☐ Attorney in Fact | ☐ Individual ☐ Attorney in Fact |
| ☐ Trustee ☐ Guardian or Conservator | ☐ Trustee ☐ Guardian or Conservator |
| ☐ Other: _____ | ☐ Other: _____ |
| Signer is Representing: _____ | Signer is Representing: _____ |

©2019 National Notary Association

**EXHIBIT "A"**

**PROPERTY LEGAL DESCRIPTION**

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CARSON IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 1 OF TRACT NO. 71206, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 1400, PAGES 1 TO 6 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM PORTIONS OF SAID LAND ALL MINERALS, OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES LYING BELOW THE SURFACE OF SAID LAND, AS EXCEPTED IN DEED RECORDED DECEMBER 08, 1960 AS INSTRUMENT NO. 1520 OFFICIAL RECORDS, AND IN DEED RECORDED MAY 18, 1959 AS INSTRUMENT NO. 590 OFFICIAL RECORDS.

APN: 7337-001-025

APN: 7337-001-026

APN: 7337-001-027

APN: 7337-001-028

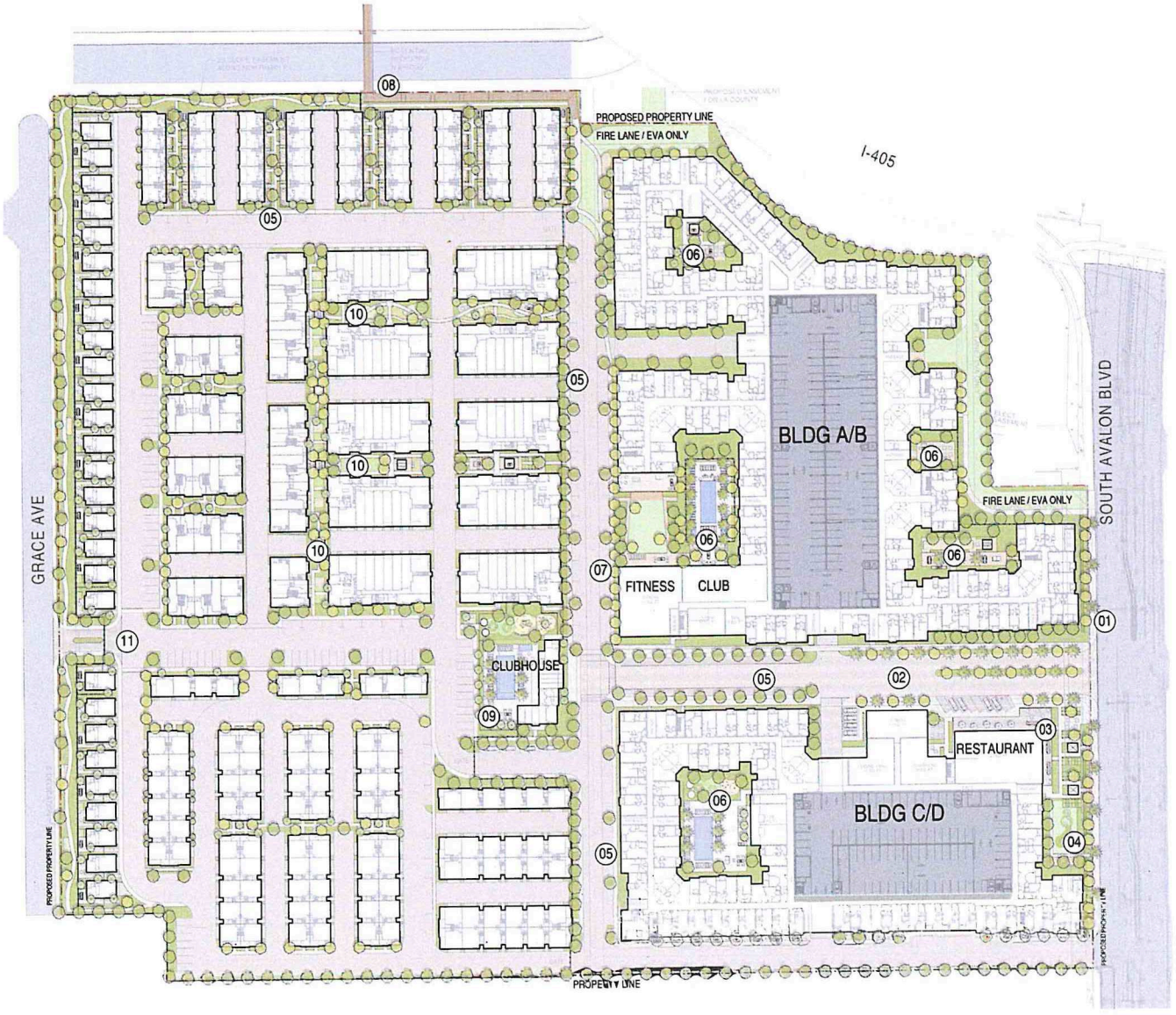
APN: 7337-001-029

**EXHIBIT "B"**

**DEPICTION OF THE PROPERTY**

# EXHIBIT "B"

## DEPICTION OF THE PROPERTY




01 IMPROVED STREETSCAPE WITH SIDEWALK AND STREET TREES PER CITY OF CARSON PUBLIC WORKS STANDARDS

02 SOUTH AVALON ENTRY DRIVE

03 RESTAURANT PATIO AREA

04 AVALON BLVD PARK

05 PARALLEL PARKING

06 RESIDENTIAL COURTYARD

07 STREETSCAPE WITH SHADED LANDSCAPE PARKWAYS AND PARALLEL PARKING

08 PEDESTRIAN BRIDGE CONNECTION

09 COMMUNITY CLUBHOUSE

10 TOWNHOME PEDESTRIAN PASEOS

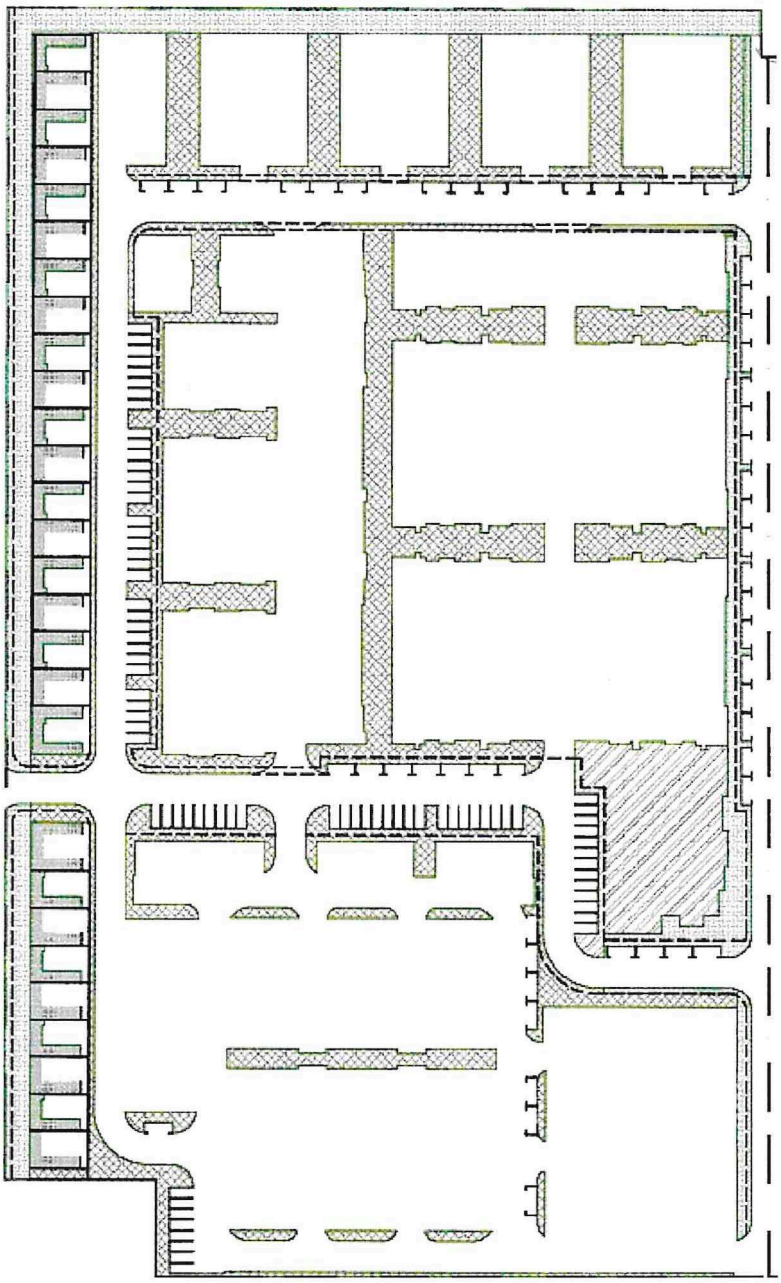
11 GRACE AVENUE ENTRY DRIVE

# EXHIBIT "C"

# PUBLIC OPEN SPACE AREAS

# EXHIBIT "C1"

## PUBLIC OPEN SPACE AREAS



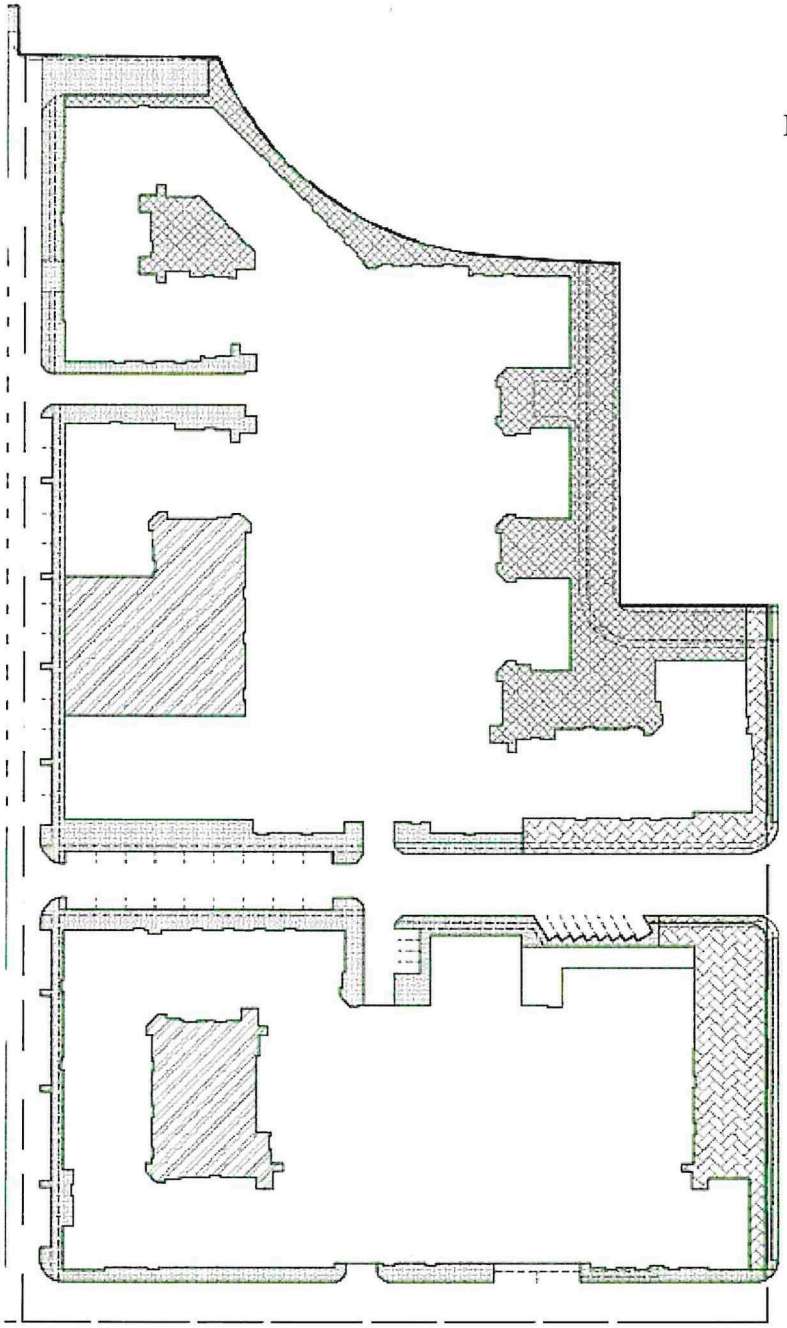
WEST PORTION - TOWNHOMES

| PRIVATE OPEN SPACE | | | | | |
|---|---|---|---|---|---|
| PRODUCT | PLAN | UNIT | AREA (S.F.) | | TOTAL (S.F.) |
| A | 1 | 14 | 714 | Backyard+Deck | 9,996 |
| | 2 | 14 | 712 | Backyard+Deck | 9,968 |
| B | 1 | 27 | 168 | Patio 8x21 | 4,536 |
| | 2 | 18 | 188 | Patio 8x23.5 | 3,384 |
| C | 1 | 62 | 55 | Deck | 3,410 |
| | 2 | 44 | 57 | Deck | 2,508 |
| D | 1 | 10 | 52 | Deck | 520 |
| | 2 | 10 | 69 | Deck | 690 |
| | 3 | 21 | 70 | Deck | 1,470 |
| | 4 | 21 | 61 | Deck | 1,281 |
| E | 1 | 20 | 87 | Deck | 1,740 |
| | 2 | 20 | 79 | Deck | 1,580 |
| | 3 | 20 | 100 | Deck | 2,000 |
| | 4 | 10 | 108 | Patio | 1,080 |
| | 5 | 40 | 118 | Deck | 4,720 |
| | Total | 351 | | | 48,883 |

| OPEN SPACE CALCULATIONS | | |
|---|---|---|
| LOT AREA: 666,717 S.F. | S.F. | AC |
| LANDSCAPE/EASEMENT<br>PUBLICALLY ACCESSIBLE COMMON OPEN SPACE | 45,867.5 | 1.05 |
| LANDSCAPE/COMMON OPEN SPACE<br>NON-PUBLICALLY ACCESSIBLE COMMON OPEN SPACE | 92,153.4 | 2.12 |
| RECREATION AREA/CLUBHOUSE<br>NON-PUBLICALLY ACCESSIBLE RECREATION OPEN SPACE | 17,499.1 | 0.40 |
| PRIVATE OPEN SPACE/BACKYARD/PATIO/DECK<br>NON-PUBLICALLY ACCESSIBLE OPEN SPACE | 48,883.0 | 1.12 |
| TOTAL | 204,403.0 | 4.69 |

**EXHIBIT "C2"**

**PUBLIC OPEN SPACE AREAS**



LEGEND

- PUBLICALLY ACCESSIBLE COMMON OPEN SPACE
- PUBLICALLY ACCESSIBLE PARK / PLAZA
- NON-PUBLICALLY ACCESSIBLE COMMON OPEN SPACE
- NON-PUBLICALLY ACCESSIBLE RECREATION OPEN SPACE

EAST PORTION - MIXED-USE BUILDINGS A/B & C/D

**OPEN SPACE CALCULATIONS**

LOT AREA: 518,522 S.F.

| BLDG/ OTHER | UNIT COUNT | PRIVATE (DECKS) | COMMON | | | TOTAL PROJECT |
|---|---|---|---|---|---|---|
| | | | PUBLIC ACCESS* | NON-PUBLIC | TOTAL COM. | |
| A-B | 464 | 22,092 | 24,409 | 62,044 | 86,453 | 108,545 |
| C-D | 300 | 13,564 | 18,445 | 11,738 | 30,183 | 43,747 |
| PARK | 0 | | 22,859 | | 22,859 | 22,859 |
| TOTAL | 764 | 35,656 | 65,713 | 73,782 | 139,495 | 175,151 |

* Public Accessible Open Space includes EVA and all exterior space up to site boundary or fencing, but excludes all drives and surface parking.

| | 0 -1 BEDROOMS | | | 2- 3 BEDROOMS | | | | public Private & Common | Provided by Public Common |
|---|---|---|---|---|---|---|---|---|---|
| | UNITS | Req'd O.S./Unit | Req'd O.S. | UNITS | Req'd O.S./Unit | Req'd O.S. | TOTAL REQ'D | | |
| A-B | 311 | 125 | 38,875 | 153 | 150 | 22,950 | 61,825 | 84,136 | 65,713 |
| C-D | 223 | 125 | 27,875 | 77 | 150 | 11,550 | 39,425 | 25,302 | |
| TOTAL | | | 66,750 | | | 34,500 | **101,250** | **109,438** | **175,151** |
| | | | | | | | | | PROVIDED |

| | | | |
|---|---|---|---|
| LOT AREA (SF) | 518,522 | 15% | 77,778 |
| | | | REQUIRED |

# EXHIBIT "D"

# PEDESTRIAN BRIDGE

**EXHIBIT "D1"**

**PEDESTRIAN BRIDGE**

ELEVATION

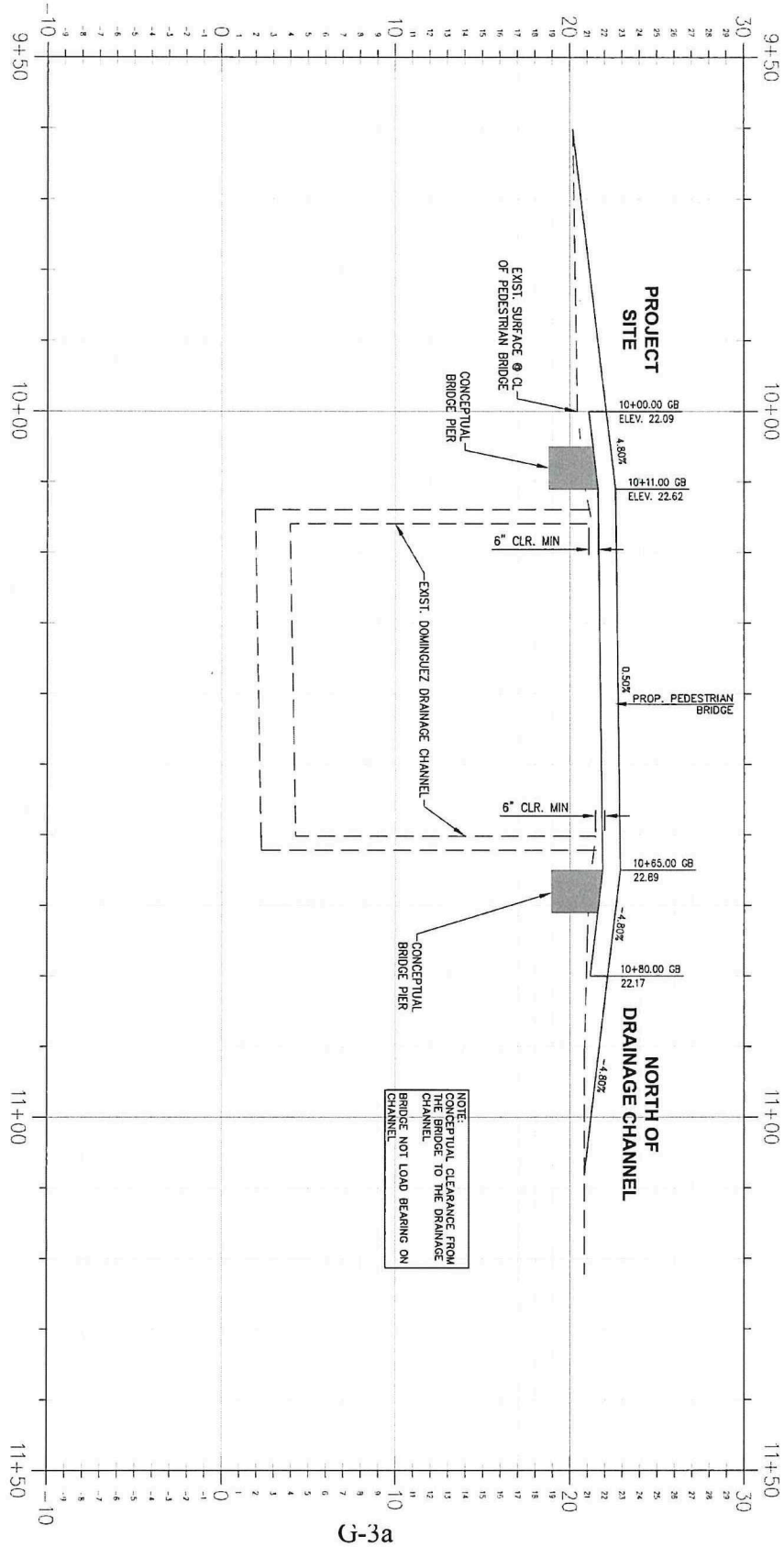
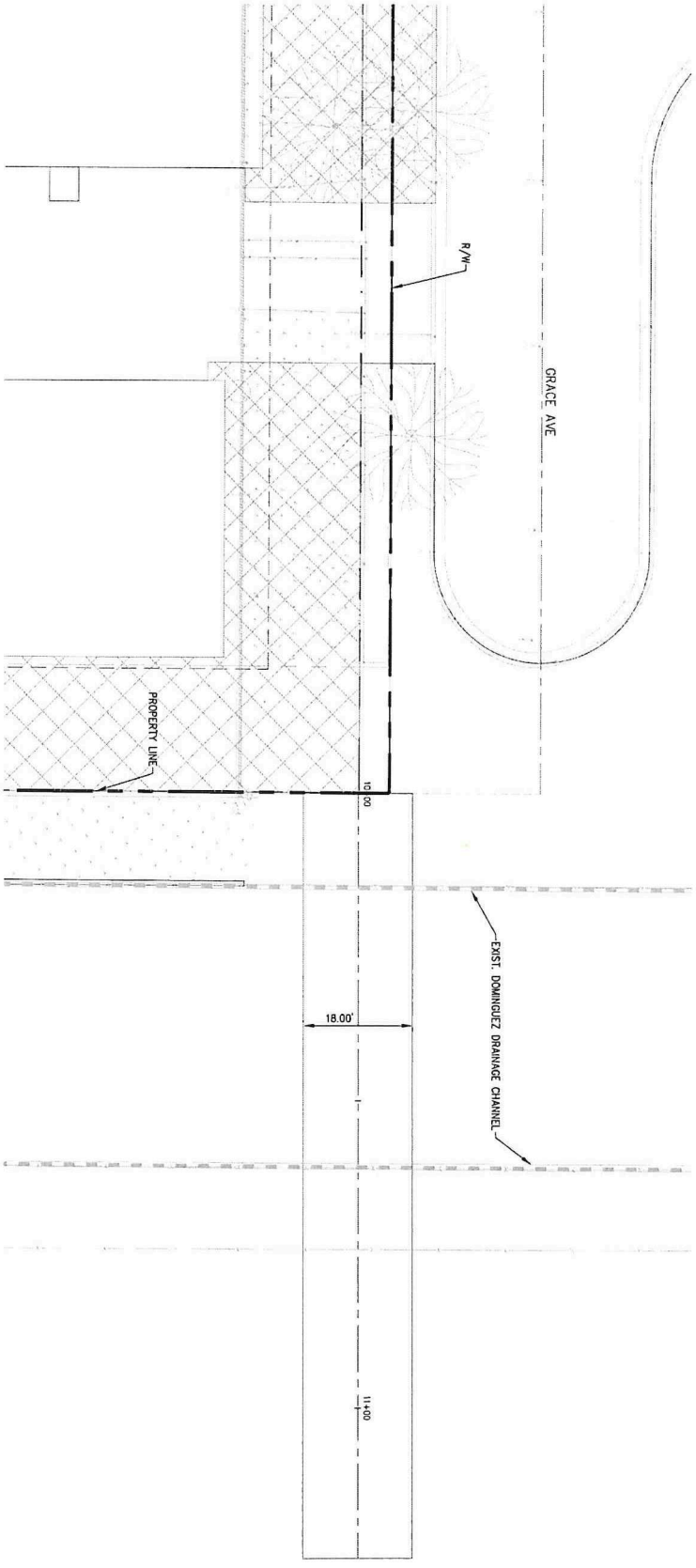


**EXHIBIT "D2"**

**PEDESTRIAN BRIDGE**



**This page is part of your document - DO NOT DISCARD**

# 20240669399

Pages: 0021

Recorded/Filed in Official Records
Recorder's Office, Los Angeles County, California

10/01/24 AT 08:00AM

| | |
|---|---|
| FEES: | 77.00 |
| TAXES: | 0.00 |
| OTHER: | 0.00 |
| PAID: | 77.00 |

LEADSHEET

202410010120036

00024839628

014920848

SEQ:
01

SECURE - 8:00AM

THIS FORM IS NOT TO BE DUPLICATED

E441953

09198336rec

RECORDING REQUESTED BY
AND WHEN RECORDED MAIL TO:

Imperial Avalon, LLC
659 North Robertson Blvd
West Hollywood, CA 90069
Attn: Chris Trueblood

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

APNs: 7337-001-025, 7337-001-026, 7337-001-027, 7337-001-028, and 7337-001-029

**PARTIAL ASSIGNMENT AND ASSUMPTION AGREEMENT**

**THIS PARTIAL ASSIGNMENT AND ASSUMPTION AGREEMENT** ("**Agreement**") is effective as of the date of the Effective Date, by and between **Imperial Avalon, LLC**, a California limited liability company ("**Assignor**"), and **Lennar Homes of California, LLC**, a California limited liability company ("**Assignee**"). Assignor and Assignee shall be collectively referred to herein as the "**Parties**" or individually as a "**Party**".

**RECITALS**

A. Assignor is the owner of that real property located at 21207 South Avalon Boulevard in the City of Carson ("**City**"), County of Los Angeles, State of California, and more particularly described in **Exhibit A** attached hereto ("**Property**").

B. On or about December 6, 2022, the City Council of the City ("**City Council**") conditionally approved a mixed-use residential and commercial development on the Property (the "**Project**"), which approvals included, without limitation, Vesting Tentative Tract Map No. 83157 ("**VTTM 83157**").

C. The approved Project consists of 764 multi-family residential units within two buildings to be constructed on the two lots on the eastern portion of the Property, which lots will be comprised of future Lots 1 and 2 when the final map (the "***Final Map***") for VTTM 83157 is recorded (the "**Apartments**"); 351 attached units all to be located on a separate lot on the western portion of the Property, which lot will be comprised of future Lot 3 of the Final Map (the "**Townhomes**"); 111,581 square feet of publicly accessible open space (including a minimum 22,859 square foot park); and 10,000 square feet of commercial space, all of which shall be restaurant use(s) and located within future Lots 1 and 2 of the Final Map.

D. On or about December 6, 2022, City and Assignor entered into a Development Agreement pertaining to the Project, recorded in the Official Records of Los Angeles County on June 4, 2024 as Document No. 20240361857, as modified from time to time (the "**Development Agreement**").

☑ Recorded concurrently "in connection with" a transfer subject to the imposition of Documentary Transfer Tax - GC 27388.1 (a) (2)





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E. Minor Modifications to the Development Agreement have been issued by the City on May 24, 2023, February 28, 2024, and June 10, 2024 (each a "**Minor Modification**" collectively the "**Minor Modifications**").

F. Assignor intends to sell that portion of the Property (i.e., future Lot 3 of the Final Map) that will contain the Townhomes to Assignee (the "**Transferred Property**" or "**For-Sale Development Site**"). The remaining portion of the Property not conveyed to Assignee (i.e., future Lots 1 and 2 of the Final Map), which will contain the Apartments in two Apartment buildings, shall be referred to herein as the "**Retained Property**" or "**Mixed-Use Development Site**". The Transferred Property is described and depicted in **Exhibit B** attached hereto.

G. In connection with the purchase and sale of the Transferred Property, from and after the Effective Date: (i) Assignor desires to assign to Assignee all of Assignor's rights, duties, and obligations under the Development Agreement with respect to the Transferred Property and the Townhomes, except as otherwise provided in Sections 1.3 and 1.4 hereto (the "**Assigned Rights and Obligations**"); and (ii) Assignee desires to accept and assume Assignor's rights, duties, and obligations under the Development Agreement with respect to the Transferred Property and the Townhomes, except as otherwise provided in Sections 1.3 and 1.4 hereto (the "**Assumed Rights and Obligations**"). The Assigned Rights and Obligations and the Assumed Rights and Obligations are referred to collectively herein as the "**Transferred Property Rights and Obligations.**" Assignor desires to retain and remain fully and solely responsible for all of Assignor's rights, duties, and obligations under the Development Agreement with respect to the Retained Property and the Apartments, except as otherwise provided in Sections 1.3 and 1.4, hereto (the "**Retained Property Rights and Obligations**"), and Assignee is agreeable to same. For the avoidance of doubt, the Parties intend that Development Agreement provisions of general applicability (e.g., insurance and indemnification obligations) shall be deemed part of both the Transferred Property Rights and Obligations, to the extent they may have applicability in connection with the Transferred Property and/or the Townhomes (except as otherwise provided in Sections 1.3 and 1.4 hereto), and the Retained Property Rights and Obligations, to the extent they may have applicability in connection with the Retained Property and/or the Apartments (except as otherwise provided in Sections 1.3 and 1.4 hereto).

H. Any assignment and assumption of the Development Agreement is subject to the requirements stated in Section 11 of the Development Agreement governing assignments.

**NOW, THEREFORE,** in consideration of the promises and covenants set forth herein, and for other good and valuable consideration, receipt of which is hereby acknowledged, the parties agree as follows:

## ARTICLE 1

## ASSIGNMENT AND ASSUMPTION OF THE TRANSFERRED PROPERTY RIGHTS AND OBLIGATIONS

1.1. **Assignment.** Assignor assigns to Assignee, as of the Effective Date, all of Assignor's rights, title and interest in and to the Transferred Property Rights and Obligations.



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1.2. **Assumption**. As of the Effective Date, Assignee accepts Assignor's assignment of the Assigned Rights and Obligations and assumes the Assumed Rights and Obligations. From and after the Effective Date, Assignee shall keep and perform all covenants, conditions and provisions of the Development Agreement, as modified by the Minor Modifications, relating to the Transferred Property Rights and Obligations, and Assignor shall retain and remain responsible for performing all covenants, conditions and provisions of the Development Agreement, as modified by the Minor Modifications, relating to the Retained Property Rights and Obligations.

1.3. **Ongoing Financial Commitments.** In accordance with Development Agreement Section 3.1-Comprehensive Development Agreement Fee, the Parties agree that Assignor shall retain sole and full responsibility for compliance with the Development Agreement requirements related to the ongoing financial commitments to the City set forth in Development Agreement Section 3.1 (as amended by the Minor Modification approval letter dated February 28, 2024, and as may be further amended), including but not limited to the "Carson Park and Recreation Subsidy" and the "Annual Payments." This Agreement will be recorded pursuant to Section 1.7 below, which satisfies the requirement to record a memorandum outlining the ongoing financial obligations under the Development Agreement in the event of a transfer as set forth in Development Agreement Section 3.1.1 (as modified by the February 28, 2024 Minor Modification).

1.4. **Division of Certain Rights and Obligations**. The rights and obligations described in those certain sections of the Development Agreement stated below (and associated general provisions, to the extent they may have applicability in connection with same as noted in Recital G) are assigned and assumed or retained as follows and incorporated into or omitted from the Transferred Property Rights and Obligations, as applicable.

1.4.1. Development Agreement Section 3.6 - Publicly Accessible, Privately Maintained Open Space. Assignee shall comply with the requirements related to the Public Open Space Areas defined and identified in Section 3.6 and on Exhibit C to the Development Agreement with respect those Public Open Space Areas on the Transferred Property. Assignor shall comply with the requirements related to the Public Open Space Areas defined and identified in Section 3.6 and on Exhibit C to the Development Agreement with respect to those Public Open Space Areas on the Retained Property.

1.4.2. Development Agreement Section 3.7 – Existing Pedestrian Bridge. Assignor shall be solely responsible for complying with all requirements related to any improvements or contributions required under Development Agreement Section 3.7.

1.4.3. Development Agreement Section 3.8 - Restaurant and Kitchen Timing. Assignor shall be solely responsible for the complying with all requirements related to the restaurant and kitchen spaces required under Development Agreement Section 3.8.

1.4.4. Development Agreement Section 3.9 - Art Benefit. Assignor shall be solely responsible for compliance with Development Agreement Section 3.9(a). Assignee shall be solely responsible for compliance with Development Agreement Section 3.9(b).

1.4.5. Development Agreement Section - 3.10 Traffic Signal. Assignee shall be solely responsible for fulfilling all requirements related to funding and installing a new traffic signal as described in Development Agreement Section 3.10.

1.5. **Reimbursement Agreement**. Assignor entered into that certain Reimbursement and Indemnification Agreement with the City, dated December 16, 2019, as amended by the First Amended Reimbursement and Indemnification Agreement dated June 1, 2022, under which Assignor is required to reimburse the City for certain Project-related costs ("**Assignor Reimbursement Agreement**"). Upon the Effective Date, or promptly thereafter, Assignee shall enter into a separate reimbursement and indemnification agreement with the City, the form and terms of which shall be substantially the same as those of the Assignor Reimbursement Agreement except that the scope of said separate agreement shall be limited to the Transferred Property and the Townhomes, including requiring Assignee to reimburse the City for all Project-related costs related to the Transferred Property for which Assignor would otherwise be required to reimburse the City under the Assignor Reimbursement Agreement ("**Assignee Reimbursement Agreement**"). Until the Assignee Reimbursement Agreement becomes effective, Assignee shall reimburse Assignor for all payments made by Assignor to City under the Assignor Reimbursement Agreement that are related to the Transferred Property within 30 days of receipt of an invoice from Assignor. Any amount remaining unpaid on and after the 31st day following receipt of an invoice from Assignor shall bear interest at a rate of six and one-half percent (6.5%) per annum until payment is received by Assignor.

1.6. **Effective Date**. For purposes of this Agreement, the "**Effective Date**" shall be the later to occur of: (1) the date on which the deed from Assignor to Assignee or Assignee's land bank (provided that in connection with a deed to Assignee's land bank Assignee has an option to acquire the Transferred Property from such land bank) for the Transferred Property is recorded in the Office of the Recorder of the County of Los Angeles; and (2) the date this Agreement is executed by all Parties and approved by the City as evidenced by the full execution of the City's representatives in the form entitled City of Carson's Consent, attached hereto as **Exhibit C**.

1.7. **Recordation**. Within thirty (30) days from the Effective Date, this Agreement shall be recorded in the Los Angeles County Clerk Recorder's office. This Agreement shall be recorded against both the Retained Property and the Transferred Property.

## ARTICLE 2

## RIGHTS AND REMEDIES

2.1. **Assignor's Release; No Assignor Liability or Default for Assignee Breach**. In accordance with Section 11.4 of the Development Agreement, Assignor shall be released from the Development Agreement with respect to the Transferred Property Rights and Obligations as of the Effective Date. As of the Effective Date, any default or breach by Assignee under the Development Agreement following the Effective Date with respect to the Transferred Property Rights and Obligations ("**Assignee Breach**") shall not constitute a breach or default by Assignor under the Development Agreement with respect to the Retained Property Rights and Obligations and shall not result in (a) any remedies imposed against Assignor, including without limitation any remedies authorized pursuant to Section 7 of the Development Agreement, or (b) modification or termination of the Development Agreement with respect to the Retained Property Rights and Obligations.

Assignor shall, however, maintain sole and full liability and responsibility after the Effective Date for any potential breach or default under the Development Agreement relative to the Transferred Property Rights and Obligations that may have occurred prior to the Effective Date, subject to the default and cure provisions set forth in Section 7 of the Development Agreement.

2.2. **No Assignee Liability or Default for Assignor Breach**. As of the Effective Date, any default or breach by Assignor under the Development Agreement prior to or after the Effective Date ("**Assignor Breach**") shall not constitute a breach or default by Assignee under the Development Agreement relative to the Transferred Property Rights and Obligations, and shall not result in (a) any remedies imposed against Assignee, including without limitation any remedies authorized pursuant to Paragraph Section 7 of the Development Agreement, or (b) modification or termination of the Development Agreement with respect to the Transferred Property.

## ARTICLE 3

## PERIODIC REVIEW OF COMPLIANCE

3.1. **Assignor Responsibilities.** In accordance with Section 6 of the Development Agreement, Assignor shall participate in the annual review of the Development Agreement conducted pursuant to Section 65865.1 of the California Government Code, and any Special Review ordered by the City Council pursuant to Section 6.2 of the Development Agreement, with respect to (1) both the Retained Property Rights and Obligations and the Transferred Property Rights and Obligations prior to the Effective Date, (2) and the Retained Property Rights and Obligations after the Effective Date, and Assignee shall have no responsibility therefor.

3.2. **Assignee Responsibilities.** In accordance with Section 6 of the Development Agreement, Assignee shall participate in the annual review of the Development Agreement conducted pursuant to Section 65865.1 of the California Government Code, and any Special Review ordered by the City Council pursuant to Section 6.2 of the Development Agreement, with respect to the Transferred Property Rights and Obligations after the Effective Date, and Assignor shall have no responsibility therefor.

## ARTICLE 4

## AMENDMENT OF THE DEVELOPMENT AGREEMENT

4.1. **Assignor**. Assignor shall not request, process or consent to any amendment or modification to the Development Agreement directly related to the Transferred Property or the Transferred Property Rights and Obligations without Assignee's prior written consent, which consent shall not be withheld unreasonably. The foregoing notwithstanding, Assignor may process any amendment or modification that does not directly affect the Transferred Property, and, if necessary, Assignee shall consent thereto and execute all documents necessary to accomplish said amendment, provided that said amendment and/or modification does not directly affect the Transferred Property or any of Assignee's Transferred Property Rights and Obligations pursuant to the Development Agreement.

4.2. **Assignee**. Assignee shall not request, process or consent to any amendment or modification to the Development Agreement directly related to the Retained Property or the

Assignor's remaining rights and obligations pursuant to the Development Agreement without Assignor's prior written consent, which consent shall not be withheld unreasonably. The foregoing notwithstanding, Assignee may process any amendment or modification that does not directly affect the Retained Property, and, if necessary, Assignor shall consent thereto and execute all documents necessary to accomplish said amendment, provided that said amendment does not directly affect the Retained Property or any of Assignor's remaining rights and obligations pursuant to the Development Agreement.

## ARTICLE 5

## GENERAL PROVISIONS

5.1. **Recitals**. The recitals in this Agreement constitute part of this Agreement and each Party shall be entitled to rely on the truth and accuracy of each recital as an inducement to enter into this Agreement.

5.2. **Notices**. All notices, invoices and other communications required or permitted under this Agreement shall be made in writing, and shall be delivered either personally (including by private courier), by certified mail, postage prepaid and return receipt requested, or by nationally recognized overnight courier service to the following addresses, or to such other addresses as the parties may designate in writing from time to time:

**If to Assignor**:
Imperial Avalon, LLC
659 North Robertson Blvd
West Hollywood, CA 90069
Attention: Chris Trueblood

*With a copy to:*
Dave Rand
Rand Paster Nelson
633 West Fifth Street, Suite 5880
Los Angeles, CA 90071
Email: dave@rpnllp.com

**If to Assignee**:
Lennar Homes of California, LLC
2000 Fivepoint, 3rd Floor
Irvine, CA 92618
Attention: JR Jones | Email: JR.Jones@lennar.com

*With a copy to:*
Deverich & Gillman LLP
20 Pacifica, Suite 320
Irvine, California 92618
Attention: Christopher D. Downs | Email: cdowns@dgllp.com

Notices personally delivered shall be deemed received upon delivery. Notices delivered by certified mail as provided above shall be deemed received on actual delivery. Notices delivered by courier service as provided above shall be deemed received twenty-four (24) hours after the date of deposit. From and after the Effective Date and until further written notice from Assignee to the City pursuant to the terms of the Development Agreement, Assignee hereby designates as its notice address for notices sent by the City pursuant to Section 13.2 of the Development Agreement, the notice address set forth above.

5.3. **Estoppel Certificates**. Within ten (10) business days after receipt of a written request from time to time, either Party shall execute and deliver to the other, or to an auditor or prospective lender or purchaser, a written statement certifying to that Party's actual knowledge: (a) that the Development Agreement is unmodified and in full force and effect (or, if there have been modifications, that the Development Agreement is in full force and effect, and stating the date and nature of such modifications); (b) that there are no current defaults under the Development Agreement by the City and either Assignor or Assignee, as the case may be (or, if defaults are asserted, so describing with reasonable specificity) and that there are no conditions which, with the passage of time or the giving of notice, or both, would constitute a default; (c) that this Agreement is unmodified and in full force and effect (or, if there have been modifications, that this Agreement is in full force and effect, and stating the date and nature of such modifications); and (d) such other matters as may be reasonably requested.

5.4. **Attorneys' Fees**. In the event of any legal or equitable proceeding in connection with this Agreement, the prevailing Party in such proceeding shall be entitled to recover its reasonable costs and expenses, including without limitation reasonable attorneys' fees, costs and disbursements paid or incurred in good faith at the arbitration, pre-trial, trial and appellate levels, and in enforcing any award or judgment granted pursuant thereto.

5.5. **No Waiver**. No delay or omission by either Party in exercising any right, remedy, election or option accruing upon the noncompliance or failure of performance by the other Party under the provisions of this Agreement shall constitute an impairment or waiver of any such right, remedy, election or option. No alleged waiver shall be valid or effective unless it is set forth in a writing executed by the Party against whom the waiver is claimed. A waiver by either Party of any of the covenants, conditions or obligations to be performed by the other Party shall not be construed as a waiver of any subsequent breach of the same or any other covenants, conditions or obligations.

5.6. **Headings**. The descriptive headings of the respective paragraphs of this Agreement are inserted for convenience only and shall not affect the construction or interpretation of the provisions of this Agreement.

5.7. **Amendment**. This Agreement may be amended only by a written agreement signed by both Assignor and Assignee.

5.8. **Successors and Assigns**. This Agreement runs with the land and shall be binding on and inure to the benefit of the parties and their respective successors and assigns.

5.9. **No Joint Venture**. Nothing contained herein shall be construed as creating a joint venture, agency, or any other relationship between the parties hereto other than that of assignor and assignee.

5.10. **Severability**. If any term or provision of this Agreement or the application thereof to any person or circumstance is found by a court of competent jurisdiction to be invalid or unenforceable, the remainder of this Agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each remaining term and provision of this Agreement shall be valid and enforceable to the full extent permitted by law; provided that, if the invalidation or unenforceability would deprive either Assignor or Assignee of material benefits derived from this Agreement or make performance under this Agreement unreasonably difficult, then Assignor and Assignee shall meet and confer and shall make good faith efforts to modify this Agreement in a manner that is acceptable to Assignor, Assignee, and the City.

5.11. **Governing Law**. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

5.12. **Third Party Beneficiaries**. Assignor and Assignee acknowledge that the City is a third party beneficiary of the terms and conditions of this Agreement to the extent necessary for City to enforce the terms and conditions of the Development Agreement. This Agreement shall not be deemed or construed to confer any rights, title, or interest, including without limitation any third party beneficiary status or right to enforce any provision of this Agreement, upon any person or entity other than Assignor, Assignee, and the City.

5.13. **Time of the Essence**. Time is of the essence in the performance by each Party of its obligations under this Agreement.

5.14. **Authority**. Each Party to this Agreement represents and warrants that the person or persons executing this Agreement on such Party's behalf has the authority to bind his or her respective Party to the performance of its obligations hereunder and that all necessary board of directors', shareholders', partners,' and other approvals have been obtained.

5.15. **Term**. The term of this Agreement shall commence on the Effective Date and shall expire upon the expiration or earlier termination of the Development Agreement, subject to any obligations under the Development Agreement that expressly survive the expiration or termination of the Development Agreement. Upon the expiration or earlier termination of this Agreement, the Parties shall have no further rights or obligations hereunder, except with respect to any obligation to have been performed prior to such expiration or termination or with respect to any default in the performance of the provisions of this Agreement that occurred prior to such expiration or termination or with respect to any obligations that are specifically set forth as surviving this Agreement or the Development Agreement.

5.16. **Counterparts**. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Signature pages may be detached from the counterparts and attached to a single copy of this Agreement to physically form one document.

5.17. **Default**. Any failure by either Party to perform any material term or provision of this Agreement shall constitute a default (a) if such defaulting Party does not cure such failure within thirty (30) days following written notice of default from the other Party, where such failure is of a nature that can be cured within such thirty (30) day period, or (b) if such default is not of a nature that

can be cured within such thirty (30) day period, if the defaulting Party does not within such thirty (30) day period commerce substantial efforts to cure such failure, or thereafter does not within a reasonable time prosecute to completion with diligence the curing of such failure. Any notice of default given hereunder shall be given in the same manner as provided in Section 5.2 hereof and shall specify in detail the nature of the failures in performance that the noticing party claims and the manner in which such failure can be satisfactorily cured.

5.18. **Entire Agreement**. This Agreement sets forth the entire understanding of the Parties hereto with respect to the subject matter hereof and may not be altered, amended, changed, waived, terminated, or modified in any respect or particular unless the same shall be in writing and signed by each of the parties hereto.

*[remainder of page left intentionally blank – signature pages follow]*

IN WITNESS WHEREOF, Assignor and Assignee have executed this Agreement by proper persons thereunto duly authorized, to be effective as of the Effective Date.

ASSIGNOR:

IMPERIAL AVALON, LLC

By: _____
Name Printed: Jason Elloulin
Title: Manager

ASSIGNEE:

LENNAR HOMES OF CALIFORNIA, LLC

Signed in Counterpart
By: _____
Name Printed: _____
Title: _____

[NOTARY ACKNOWLEDGEMENTS ATTACHED]



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**IN WITNESS WHEREOF,** Assignor and Assignee have executed this Agreement by proper persons thereunto duly authorized, to be effective as of the Effective Date.

**ASSIGNOR:**

**IMPERIAL AVALON, LLC**

Signed in Counterpart

By: _____

Name Printed: _____

Title: _____

**ASSIGNEE:**

**LENNAR HOMES OF CALIFORNIA, LLC**

By: _____

Name Printed: Gary Jones

Title: Vice President

[NOTARY ACKNOWLEDGEMENTS ATTACHED]

**EXHIBIT A TO ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT**

**Description of the Property**

All that certain real property situated in the County of Los Angeles, State of California, described as follows:

LOTS 1, 2 AND 3 OF TRACT NO. 83157, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 1449 PAGES 48 TO 52 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

SUBJECT TO EASEMENTS, COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, RIGHTS-OF-WAY, AND OTHER MATTERS OF RECORDS, IF ANY

**FORMERLY DESCRIBED AS**:

LOT 1 OF TRACT NO. 71206, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 1400 PAGES 1 TO 6 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

EXCEPT THEREFROM PORTIONS OF SAID LAND ALL MINERALS, OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES LYING BELOW THE SURFACE OF SAID LAND, AS EXCEPTED IN DEED RECORDED DECEMBER 8, 1960 AS INSTRUMENT NO. 1520 AND IN DEED RECORDED MAY 18, 1959 AS INSTRUMENT NO. 590, BOTH OF OFFICIAL RECORDS.

Assessor's Parcel Number: 7337-001-025, -026, -027,-028, -029

**EXHIBIT B TO ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT**

**Description and Depiction of the Transferred Property**

[SEE ATTACHED]



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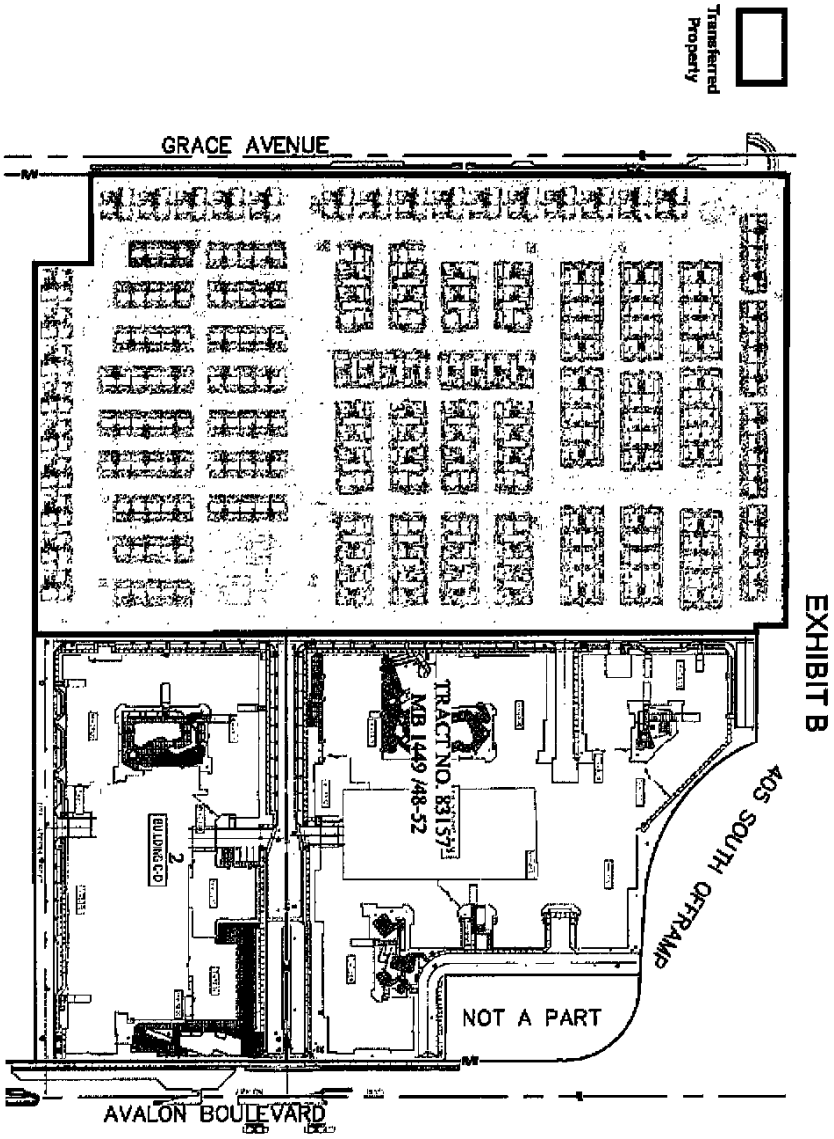



EXHIBIT B
-2-

01007.0580/998151.4

# LEGAL DESCRIPTION

LOT 3 OF TRACT NO. 83157, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS RECORDED IN BOOK 1449 PAGES 48 THROUGH 52, INCLUSIVE OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

SUBJECT TO: EASEMENTS, COVENANTS, CONDITIONS, RESTRICTIONS, RESERVATIONS, RIGHTS, RIGHTS-OF-WAY, AND OTHER MATTERS OF RECORDS, IF ANY.

PREPARED UNDER THE DIRECTION OF:

09/06/2024

CHRISTOPHER JONES, PLS 8193
chris.jones@kpff.com

LICENSED LAND SURVEYOR CHRISTOPHER R. JONES No. 8193 STATE OF CALIFORNIA

kpff

700 South Flower St., Suite 2100
Los Angeles, CA 90017
O: 213.418.0201
F: 213.266.5294
www.kpff.com

EXHIBIT "A"
LOT 3

IMPERIAL AVALON
CITY OF CARSON/ COUNTY OF LOS ANGELES/ STATE OF CALIFORNIA

| | |
|---|---|
| REV.: | |
| DATE: | 09-05-2024 |
| DRAWN BY: | CS |
| CHECKED BY: | DB |
| PROJECT NO. | 2200829.04 |
| SHEET: | 2 |



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EXHIBIT C TO ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT

City of Carson's Consent

Pursuant to Section 11 of the Development Agreement, the City of Carson hereby consents to the assignment and assumption of the Transferred Property Rights and Obligations as set forth in the Partial Assignment and Assumption Agreement to which this Exhibit is attached and agrees to the terms and conditions set forth herein.

CITY OF CARSON,
a municipal corporation of the State of California

By: _____
Name: Saied Naaseh **aka Saied Naaseh Shahry**
Its: Community Development Director

APPROVED AS TO FORM:

By: _____
Name: Sunny K. Soltani **aka Sanaz Khalifeh Soltani**
Its: City Attorney



01007 0580/998151.4

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A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of Los Angeles )

On September 11 2024, before me, Alexander N Smith, Notary Public, personally appeared Jason Illoulian, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/~~they~~ executed the same in his/~~her~~/~~their~~ authorized capacity(~~ies~~), and that by his/~~her~~/~~their~~ signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

ALEXANDER N. SMITH
Notary Public - California
Los Angeles County
Commission # 2353568
My Comm. Expires Apr 1, 2025

NOTARY

01007.0580/998151.4

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of ORANGE )

On SEPTEMBER 27, 2024, before me, TERESA M. WILKINSON, Notary Public, personally appeared GARY JONES, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Teresa M. Wilkinson

TERESA M. WILKINSON
COMM. #2394778
Notary Public · California
Orange County
My Comm. Expires Feb. 23, 2026

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of _____ )

On _____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature:_____

NOTARY

01007.0580/998151.4

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of Los Angeles )

On Sept. 12, 2024 before me, Joy Simarago, Notary Public, personally appeared Saied Naaseh Shahry, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she/they~~ executed the same in his/~~her/their~~ authorized capacity(~~ies~~), and that by his/~~her/their~~ signature(~~s~~) on the instrument the person(~~s~~), or the entity upon behalf of which the person(~~s~~) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

JOY SIMARAGO
Notary Public - California
Los Angeles County
Commission # 2428866
My Comm. Expires Dec 2, 2026

Signature Joy Simarago

NOTARY

01007.0580/9981514

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT** **CIVIL CODE § 1189**

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California )
County of Orange )

On 9-12-2024 before me, CARRIE E. STRAND, Notary Public
*Date* *Here Insert Name and Title of the Officer*

personally appeared Sanaz Khalifeh Soltani
*Name(s) of Signer(s)*

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

CARRIE E. STRAND
Notary Public - California
Orange County
Commission # 2354448
My Comm. Expires Apr 14, 2025

Signature Carrie E. Strand
*Signature of Notary Public*

*Place Notary Seal Above*

**OPTIONAL**

*Though this section is optional, completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.*

**Description of Attached Document**

Title or Type of Document: _____ Document Date: _____

Number of Pages: _____ Signer(s) Other Than Named Above: _____

**Capacity(ies) Claimed by Signer(s)**

| Signer's Name: | Signer's Name: |
|---|---|
| ☐ Corporate Officer — Title(s): | ☐ Corporate Officer — Title(s): |
| ☐ Partner — ☐ Limited ☐ General | ☐ Partner — ☐ Limited ☐ General |
| ☐ Individual ☐ Attorney in Fact | ☐ Individual ☐ Attorney in Fact |
| ☐ Trustee ☐ Guardian or Conservator | ☐ Trustee ☐ Guardian or Conservator |
| ☐ Other: | ☐ Other: |
| Signer is Representing: | Signer is Representing: |

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CITY OF CARSON

May 24, 2023

Mr. Dave Rand
Rand Paster & Nelson, LLP
633 West Fifth Street
64th Floor
Los Angeles, CA 90071

Imperial Avalon, LLC
4276 Katella Avenue, #231
Los Alamitos, CA 90720
Attn: Darren Embry

**Re: Imperial Avalon Specific Plan Development Agreement – Minor Modification Application Request Approval**

Dear Mr. Rand:

The City of Carson ("City") is in receipt of your letter dated March 23, 2023 requesting minor modifications to Development Agreement No. 23-19 on behalf of Imperial Avalon LLC, the applicant (the "Applicant") of a proposed mixed use development project consisting of 764 multifamily units, 351 townhomes and 10,000 square feet of commercial uses at 21207 South Boulevard in the City.

In accordance with Development Agreement Section 12.4, which permits the Community Development Director to ministerially grant certain "Minor Project Modifications" to the "Agreement, the Project and/or the Development plans," we have reviewed your requested modifications and hereby grant the following Minor Modifications for the following provisions of the Development Agreement. In addition, this Minor Modification approval also clarifies that the required Project building setback along the subject property's 405 freeway fronting property line is actually 10 feet, as identified on the approved Project plans, as opposed to the 30 feet referenced in the Specific Plan (Specific Plan No. 21-19).

1. **Recital G.**

The following corrects the reference in Recital G to Planning Commission Resolution No. 22-244:

"*Project Approvals.* On the same day, the Planning Commission, after giving notice pursuant to the CMC and Government Code §§ 65090, 65091, 65092 and 65094, held a public hearing on the Development Application, and following the hearing, adopted Planning Commission Resolution No. 22-244~~846~~, which: (i) made CEQA findings and determinations as referenced above; (ii) conditionally approved Site Plan and Design Overlay Review ("**DOR**") No. 1803-19 and Vesting Tentative Tract Map ("**VTTM**") No. 83157 for the Project subject to City Council approval of General Plan Amendment ("**GPA**") No. 105-19 (changing the General Plan land use designation for the Property from Regional Commercial/Low Density Residential to Urban Residential), Specific Plan ("**SP**") No. 21-19 (Imperial Avalon Specific Plan), Zone Change ("**ZCC**") No. 188-19 (changing the Property zoning from Commercial Automotive (CA)/Residential, multifamily – 8 units per acre (RM-8) with a Design Overlay to Imperial Avalon Specific Plan [IASP]), and Development Agreement ("**DA**") No. 23-19 (this

Agreement, inclusive of the Adopting Ordinance); and (iii) recommended that the City Council approve GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 for the Project (DOR No. 1803-19, VTTM No. 83157, GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 collectively, together with the EIR, the "**Entitlements**")."

**2. Recital H.**

The following change further clarifies the actions taken by the City Council as set forth in adopted City Council Resolution No's. 22-242 and 22-243 and Ordinance No's. 22-2221 and 22-2222, including with respect to CEQA.

"On December 6 , 2022, the City Council, after provision of the public notice required by law, held a public hearing to consider the Development Application and the Planning Commission's actions and recommendations thereon.~~, and f~~Following the hearing, the City Council: (i) adopted ~~conditionally approved GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 as set forth in~~ City Council Resolution No. 22-~~1846~~242, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the VTTM and making findings pursuant to CEQA Guidelines Sections 15162-15164, and modifying, pursuant to CMC Section 9173.4(c)(2)(b), the decision of the Planning Commission adopting Planning Commission Resolution No. 22-244 with respect to the conditions of approval of the VTTM, pursuant to Developer's appeal; (ii) adopted City Council Resolution No. 22-243, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the GPA, and approving the GPA; (iii) introduced, and subsequently, on December 13, 2023, adopted, Ordinance No. 22-2221, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the SP and ZCC, conditionally approving the SP, and approving the ZCC; and (iv) introduced, and subsequently, on December 13, 2023, adopted, Ordinance No. 22-2222, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the DA, and approving the DA. The Planning Commission and the City Council have found, on the basis of substantial evidence based on the entire administrative record, that this Agreement is consistent with all applicable plans, rules, regulations and official policies of the City."

**3. Section 4.7, "Role of Project Development Approvals."**

Section 4.7 of the Development Agreement is hereby modified to permit construction of either the townhome and/or the multifamily components of the Project prior to recordation of the final subdivision map, subject to the following requirements.

"4.7 Role of Project Development Approvals. Except as provided within this Agreement, the Project Development Approvals shall exclusively control the uses of the Property, the density or intensity of use, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes and the design, improvement, and construction standards and specifications applicable to the Project. Pursuant to Government Code Section 66452.6, the term of any tentative map for the Property or any portion thereof, if any, filed within the term of this Agreement shall automatically be extended for the term of this Agreement, as amended by the Project Development Approvals. In addition, Developer shall have the right to commence Project construction of both Apartment buildings and the Townhomes within the Project prior to the recordation of an approved final subdivision map No. 83157 if applicable permits have been issued and all other applicable conditions of approval and Development Agreement provisions are met. However, the

approved final subdivision map must be recorded prior to issuance of any certificates of occupancy (temporary or otherwise) for the Project, and prior to any occupancy of the Project. Following recordation of the final subdivision map, temporary certificates of occupancy shall be issued if buildings or units are deemed to have satisfied all applicable fire-life safety components and systems to safely occupy the completed areas as determined by the Building Official. ~~building permits for the Townhomes; (ii) issuance of a certificate of occupancy for either of the Apartment buildings.~~ No final certificates of occupancy shall be issued prior to satisfaction of (without limitation) all conditions of approval that are required to be completed "Prior to Issuance of Occupancy Permits" and all applicable Development Agreement provisions. ~~occurrence of either of the following: (i) issuance of any building permits for the Townhomes; (ii) issuance of a certificate of occupancy for either of the Apartment buildings.~~ Neither the Apartment lots nor the Apartment buildings may be individually sold prior recordation of the approved final subdivision map No. 83157. Any tentative map prepared for the Project subdivision will comply with Government Code Section 66473.7."

4. **Section 9.3, "Failure to Maintain Insurance and Proof of Compliance."**

The Development Agreement is further modified to require proof of insurance prior to issuance of the first permit authorizing ground disturbing activity as specified below, rather than 30 days from the Agreement's effective date, except for professional liability insurance, for which the deadline to submit proof of the required insurance shall be August 1, 2023.

"**9.3: Failure to Maintain Insurance and Proof of Compliance.** Developer shall deliver to City, in the manner required for notices, copies of certificates of all insurance policies together with endorsements required hereunder together with evidence satisfactory to City of payment required for procurement and maintenance of each policy within the following time limits:

a. For insurance required above except for professional liability insurance, ~~within thirty (30 days) after the Effective Date~~ prior to issuance of the first permit requiring or authorizing any construction or ground disturbance for the Project. For the avoidance of doubt, removal and disassembly of the Park clubhouse structure and/or Park coaches, without demolition of foundation or slab, is not included in the preceding sentence. For professional liability insurance, by August 1, 2023.

b. For any renewal or replacement of a policy already in existence, at least ten (10) days before the expiration or termination of the existing policy.

c. If Developer fails or refuses to procure or maintain insurance as required hereby or fails or refuses to furnish City with required proof that that insurance has been procured and is in force and paid for, such failure or refusal shall be a default hereunder."

5. **Specific Plan I-405 Setback Requirement.**

The City also desires to resolve an inconsistency between the required Project building setback fronting the 405 freeway (as measured from the property line) as specified in Table 4 of the Specific Plan and the 10-foot setback identified on the approved Project plans. In accordance with Development Agreement Section 12.4, the City therefore grants the following Minor Modification to clarify that Specific Plan Table 4 requires a 10-foot (rather than a 30-foot) building setback from the Project's I-405 fronting property line consistent with the approved Project plans.

**Table 4: Building Separation Setback Requirements**

| SETBACK FROM | MINIMUM |
|---|---|
| … | |
| I-405 Ramp | ~~30 ft.~~ 10 ft. |

In accordance with Development Agreement Section 12.4, this hereby effectuates the minor modifications set forth above, which were requested and are agreed to by the Applicant. Additionally, Applicant expressly acknowledges and agrees that the indemnification provisions of the Development Agreement (Article 8) and the Specific Plan conditions of approval (Condition No. 10) shall extend to and encompass the minor modifications made hereby. Except as amended hereby, the provisions of the Development Agreement and Specific Plan shall remain unchanged and in full force and effect.

Sincerely,

Saied Naaseh
Director of Community Development
City of Carson

ACKNOWLEDGED AND AGREED:

DEVELOPER
IMPERIAL AVALON, LLC, a California limited liability company

By:_____
Name: Jason Illoulian
Title: Manager

CITY OF CARSON

February 28, 2024

Mr. Dave Rand
Rand Paster & Nelson, LLP
633 West Fifth Street, Suite 5880
Los Angeles, CA 90071

Imperial Avalon, LLC
659 North Robertson
West Hollywood, CA 90069
Attn: Chris Trueblood

**Re: Imperial Avalon Specific Plan Development Agreement-Minor Modification Application Request Approval**

Dear Mr. Rand:

The City of Carson ("City") is in receipt of your letter dated December 4, 2023 requesting minor modifications to Development Agreement No. 23-19 on behalf of Imperial Avalon LLC, the applicant (the "Applicant") of a proposed mixed use development project consisting of 764 multifamily units, 351 townhomes and 10,000 square feet of commercial uses at 21207 South Avalon Boulevard in the City.

In accordance with Development Agreement Section 12.4, which permits the Community Development Director to ministerially grant "Minor Project Modifications" to the "Agreement, the Project and/or the Development Plans," we have reviewed your requested modifications and hereby grant Minor Modifications for the following provisions of the Development Agreement.

(i) Section 3.1 is modified to as follows:

In lieu of the Developer and the Project opting into Citywide Community Facilities District No. 2018-01 ("CFD") (estimated to have a net present value over the life of this Agreement of approximately fourteen million six hundred fifty-eight thousand three hundred sixty-two dollars ($14,658,362.00) and paying Development Impact Fees pursuant to Ordinance No. 19-1931 (estimated to be approximately thirteen million one hundred twenty-seven thousand fourteen dollars ($13,127,014.00) based on current Project features), Developer shall pay a Development Agreement Fee totaling thirteen million, one hundred twenty seven thousand, and fourteen dollars ($13,127,014.00) (the "Development Agreement Fee") (this includes an additional fee of $2,000 per residential unit multiplied by 1,115 units even if fewer units are constructed pursuant to Section 12.5 (equal to two million two hundred thirty thousand dollars ($2,230,000.00) and includes all applicable City permit and processing fees related to the Project). However, Developer shall not be entitled to a reimbursement of any permit

and plan check fees paid before or as of the Effective Date of the Settlement Agreement and Mutual Release entered into between Developer and City ("Settlement Agreement.") Developer shall pay all permit and plan check fees related to any Project change that requires (a) an amendment to the Development Agreement or (b) a new development agreement. Furthermore, this Agreement shall not affect, excuse or modify Developer's obligation to reimburse the City for costs and fees, including attorneys' fees, incurred by the City as set forth in the First Amended Reimbursement and Indemnification Agreement By and Between City of Carson and Imperial Avalon, LLC, as the same may be amended from time to time by the Parties ("Reimbursement Agreement"), Developer expressly acknowledges the Reimbursement Agreement's definition of "City Costs" includes the cost of any consultants retained by the City to review and evaluate any permits, plans and Development Approvals for the Project. Developer shall have the right, in its sole and absolute discretion, to pay the Development Agreement Fee as prescribed below or cause the Development Agreement Fee contributions and payments to be made by a nonprofit entity in accordance with the terms prescribed by this Agreement. Except as otherwise provided for the Carson Park and Recreation Subsidy in Sections 3.1.1, the amounts prescribed below shall be paid either by the Developer or the nonprofit entity at the City's direction toward specific programs, projects or uses within the following categories: (i) park, recreational and open space site acquisition, facility development and maintenance, (ii) City infrastructure improvements, maintenance and upgrades, and (iii) community recreational benefits and subsidies ("Development Agreement Fee Categories"). The Development Agreement Fee payments are limited to the amounts and subject to the schedule set forth below, unless the Developer and City agree to an earlier payment date, and shall be paid directly from the Developer or the nonprofit entity to the City:

3.1.1 Three hundred thousand dollars ($300,000.00) shall be due upon the Effective Date of this Agreement, and shall be used by City to subsidize Carson residents' fees and costs associated with park and recreational registration, trophies and jerseys ("Carson Park and Recreation Subsidy").

Twelve Million, Eight Hundred Twenty Seven Thousand and Fourteen Dollars ($12,827,014.00) shall be due when the second Apartment building is constructed and paid subject to the following payment schedule for annual installments in the amount of one hundred twenty nine thousand five hundred sixty five dollars and eighty cents ($129,565.80) each: the first payment is due 548 days after the issuance of a certificate of occupancy for the second Apartment building and annually thereafter for ninety eight (98) years (for a total of 99 payments). Payment of the installment payments after the first installment payment shall be due on the anniversary date of the

first installment payment ("Annual Payments").

Developer's obligations to pay the annual installment payments set forth in this Section 3.1.1 shall survive and continue in effect and be binding on the Property and subsequent owners notwithstanding the expiration or termination of any other provisions of this Agreement. In the event of a sale of any portion of the Property, and in addition to City's rights under Article 11 of the Development Agreement and prior to or concurrent with City's consent to any assignment or transfer of the Development Agreement as described in Article 11, Developer shall record a Memorandum outlining the ongoing financial commitments stated in this Section 3.1.1. If any annual installment payment is not paid in full by the annual payment due date ("Defaulted Annual Payment") without demand or notice by City (i) Developer shall pay to the City a late fee of one-thousand dollars ($1,000.00) per day until the Defaulted Annual Payment is paid in full, and (ii) City may exercise all rights and remedies and to maintain any action in law or equity to enforce the terms and covenants of this Agreement.

3.1.2 ~~Five million dollars ($5,000,000.00) shall be due prior to issuance of a grading permit for the Project ("Initial DA Fee Payment"). The City shall have the option to use the Initial DA Fee Payment in whole or in part for low-income housing including but not limited to maintenance and upgrades to, and assistance with the preservation of, existing mobilehome parks located throughout the City.~~

3.1.3 ~~Five million dollars ($5,000,000.00) shall be due prior to issuance of a building permit for the first Townhome to be constructed with the Project~~.

3.1.4 ~~Four million dollars ($4,000,000.00) shall be due prior to issuance of a building permit for the first Apartment building to be constructed within the Project, and a second payment of four million dollars ($4,000,000.00) shall be due upon issuance of a building permit for the second Apartment building to be constructed ,within the Project, and a third payment of four million dollars ($4,000,000.00) shall be due upon issuance of a building permit for the 50th Townhome building to be constructed within the Project.~~

3.1.5 ~~Five million dollars ($5,000,000.00) shall be due within six months following issuance of a certificate of occupancy for the first Apartment building to be constructed within the Project.~~

3.1.6 ~~Two million seven hundred fifteen thousand three hundred and seventy-six dollars ($2,715,376.00) shall be due prior to issuance of a building permit for the 150th Townhome to be constructed within the Project.~~

(ii) Section 3.3 "Affordable Housing Benefit" is deleted in its entirety and replaced with "Intentionally Omitted.

(iii) Section 3.5 "Apartment and Townhome Enhanced Sustainability and Environmental Benefits" is modified as follows:

Developer shall agree to incorporate the following enhanced sustainability and environmental benefits into construction of the Apartments and Townhomes for the Project. In recognition of the enhanced environmental benefits provided by the Project Apartments and Townhomes through this Section 3.5, the City shall subject the Project Apartments and Townhomes to the 2019 California Building Standards Code as applicable to and/or adopted by the City pursuant to CMC Article VIII, provided Developer submits a conceptual design package to the City's Building & Safety Department on the City Building & Safety Department's Online Plan check (BSOP) website prior to January 1, 2023. The conceptual design package shall consist of a schematic set of development and design plans for all disciplines with sufficient detail for the City to undertake zoning compliance review, but shall not be required to include landscaping, structural, energy, accessibility, mechanical, electrical and/or plumbing related plans and design, provided it is within the City's legal discretion to deem such submittal complete as necessary to facilitate such grandfathering under applicable state and local law. A full set of construction plans with all disciplines shall be submitted prior to January 1, 2024 for the Apartments and Townhomes. ~~If the Building & Safety plan check application validity period of one year plus the two six month extension periods thereafter expire prior to issuance of the required permits/approvals (expected to include, without limitation, rough grading approval and building pad/foundation permits), then the plans will expire and will be required to meet the code in effect at the time of such expiration, and new plan check fees will be required.~~ Upon submittal of the full set of construction drawings, the Project shall be subject to the 2019 California Building Standards Code for the Term of this Agreement as specified in Section 2.1.

It is further acknowledged that Developer submitted the necessary construction documents to the City's Building & Safety Department on or before December 11, 2023, prior to the January 1, 2024 deadline, and has therefore fully satisfied the requirements as set forth above in this modified Section 3.5 to subject the entire Project (Townhomes and Apartments) to the 2019 California Building Standards Code for the duration of the Term of the Agreement.

(iv) Section 3.7 "Publicly Accessible Pedestrian Bridge" is deleted in its entirety.

(v) A new Section 3.7 entitled "Existing Pedestrian Bridge" is added which states

the following:

Immediately following approval of the Minor Modification of the Development Agreement, Developer and City shall immediately commence good faith negotiations on improving the existing bridge that crosses the Dominguez Channel and connects Avalon Boulevard with Lenardo Boulevard ("Bridge") . Such negotiations will focus on improvements to the Bridge that will a) create and enhance the pedestrian access between Avalon Boulevard and Lenardo Boulevard; and b) improve the aesthetic appearance of the Bridge and the pedestrian connection between Avalon Boulevard and Lenardo Boulevard. Subject to any requisite approvals from any authority with jurisdiction over the Bridge, such improvements will include, but are not limited to, the following:

(4) removing the existing "PEDESTRIANS PROHIBITED" sign to allow for pedestrian access;
(5) restriping, or otherwise improving the aesthetic appearance of the Bridge;
(6) improving the pedestrian experience between Avalon Boulevard and Lenardo Boulevard through the installation of new landscaping and amenities such as additional wayfinding signage, etc. or other aesthetic improvements; (collectively, the "Improvements").

Developer shall contribute an aggregate amount up to but not to exceed one hundred and twenty-five thousand dollars ($125,000), unless otherwise agreed to by Developer and City in a separate agreement, towards the Improvement no later than five (5) years from the Effective Date of this Agreement.

(v) Section 3.11 "Carson and Avalon 405 Interchange Landscaping Improvement" is deleted in its entirety and replaced with "Intentionally Omitted.".

(vi) Section 3.12 "Purple Pipe" is deleted in its entirety and replaced with "Intentionally Omitted".

(vii) Section 4.7. "Role of Project Development Approvals", as amended by the approved May 24, 2023 Minor Modification, is further amended as follows:

Except as provided within this Agreement, the Project Development Approvals shall exclusively control the uses of the Property, the density or intensity of use, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes and the design, improvement, and construction standards and specifications applicable to the Project. Pursuant to Government Code Section 66452.6, the term of any tentative map for the Property or any portion thereof, if any, filed within the term of this Agreement shall automatically be extended for the term of this Agreement, as amended by the Project Development Approvals. In addition, Developer shall have the right to commence Project construction of both the

Apartment buildings and the Townhomes within the Project prior to the recordation of an approved final subdivision map No. 83157 if applicable permits have been issued and all other applicable conditions of approval and Development Agreement provisions are met. However, the approved final subdivision map must be recorded prior to issuance of any certificates of occupancy (temporary or otherwise) for the Project and prior to any occupancy of the Project. Following recordation of the final subdivision map, Temporary certificates of occupancy shall be issued if buildings or units are deemed to have satisfied all applicable fire-life safety components and systems to safely occupy the completed areas as determined by the Building Official. ~~No final certificates of occupancy shall be issued prior to satisfaction of (without limitation) all conditions of approval that are required to be completed "Prior to Issuance of Occupancy Permits" and all applicable Development Agreement provisions.~~

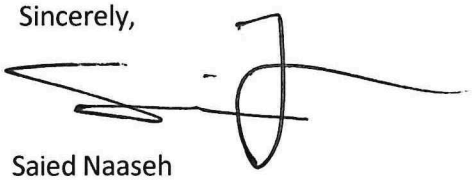
~~Neither the Apartment lots nor the Apartment buildings may be individually sold prior to recordation of the approved final subdivision map No. 83157.~~ To support development of the Project, which may be completed in phases, the City hereby agrees that final certificates of occupancy shall also be issued for each individual Project phase. The anticipated phases consist of: (i) the Townhome component, (ii) the first Apartment building and (iii) the second Apartment building, respectively. Any tentative map prepared for the Project subdivision will comply with Government Code Section 66473.7

**B.** Within thirty (30) days after the closing of the loan Developer obtains to fund the development of the Project, the Developer shall record with the Los Angeles County Recorder's Office the Minor Modification signed by the Community Development Director and provide to the City a copy of the recorded Minor Modification bearing a recording stamp affixed by the Los Angeles County Recorder's Office.

***

In accordance with Development Agreement Section 12.4, this hereby modifies and memorializes the changes requested by the Applicant and identified above.

Sincerely,



Saied Naaseh
Director of Community Development
City of Carson

CITY OF CARSON

June 10, 2024

Mr. Dave Rand
Rand Paster & Nelson, LLP
633 West Fifth Street, Suite 5880
Los Angeles, CA 90071

Imperial Avalon, LLC
4276 Katella Avenue, #231
Los Alamitos, CA 90720
Attn: Darren Embry

**Re: Imperial Avalon Mixed-Use Project – Approval of Minor Modifications to Development Agreement, Conditions of Approval, and MMRP**

Dear Mr. Rand:

Imperial Avalon LLC (the "Applicant") has requested to further modify the proposed mixed use development project consisting of 764 multifamily units, 351 townhomes, and 10,000 square feet of commercial uses at 21207 South Avalon Boulevard ("Property") in the City of Carson ("City") (the "Project").

In the interest of ensuring flexibility in the midst of a challenging economic environment, and to allow for potential transfer of the Townhome portion of the Property to an experienced residential single family home builder, the City agrees to issue a Minor Modification to the Development Agreement and related Project conditions of approvals as set forth below. In addition, certain technical changes to the Project conditions of approval are necessary to reflect that the City no longer contracts with the County of Los Angeles for subdivision map condition clearance related purposes. Thus, these changes will reflect that the City (through its outside third party consultant, Transtech) will now be primarily responsible for clearing subdivision related conditions of approval.

Therefore, in accordance with Section 12.4 of Development Agreement No. 23-19, as modified ("Development Agreement"), which permits the Community Development Director to ministerially grant "Minor Project Modifications" to the "Agreement, the Project and/or the Development Plans," we have reviewed the requested modifications and hereby grant Minor Modifications for the following provisions of (1) the Development Agreement; (2) the Conditions of Approval for Imperial Avalon Site Plan and Design Review No. DOR 1803-19, Exhibit "B" of Planning Commission Resolution No. 22-2846 ("DOR COAs"); (3) the Conditions of Approval for Imperial Avalon Vesting Tentative Tract Map 83157, Exhibit "C" of Planning Commission Resolution No. 22-2846 ("VTTM COAs"); and (4) the Mitigation Monitoring and Reporting Program Table included as Section 4.2 in the Final Environmental Impact Report for the Project (SCH# 2021010116) ("MMRP"), which were incorporated into the Project.

Deleted text is in ~~strikethrough~~ and added text is in **bold underline** where existing language is referenced.

**Revisions to Development Agreement**

1. Section 3.9 of the Development Agreement, entitled "Art Benefit," is deleted and replaced in its entirety with the following:

"**3.9 Art Benefit.**

a. **Apartments.** Prior to issuance of **any certificates of occupancy** ~~the first building permit for the Townhomes and prior to issuance of building permits~~ for each of the two Apartment buildings, the Developer shall pay a public art fee equal to one percent (1%) of the total building valuation ~~for all Townhomes and each of the two~~ **for the respective** Apartment buildings ~~(i.e., all Project buildings)~~ as determined by the City's Building Official in accordance with the Marshall-Swift Valuation Guide per the City Building Official's standard practice ("~~Project~~ **Apartment** Art Fee").

In lieu of paying the **Apartment** ~~Project~~ Art Fee, Developer may incorporate on-site art **("Apartment Art")**, including but not limited to art within the exterior north side of the Project facing the 405 freeway, to the satisfaction of the Director, in which case Developer shall submit a ~~Project~~ **Apartment** Art plan, valuation, and implementation plan to the Director prior to issuance of the first ~~Project building permit~~ **certificate of occupancy for the respective Apartment building**. Unless otherwise approved by the Director pursuant to the **Apartment** Art implementation plan, Developer's on-site **Apartment** art which corresponds to a particular building shall be installed prior to the issuance of a **final** certificate of occupancy for the respective buildings~~, and art that does not correspond to any particular building shall be installed within six months following issuance of the certificate of occupancy for the first Apartment building constructed as part of the Project.~~ Individual art valuations shall be submitted for each ~~Project~~ building ~~prior to issuance of building permits for the respective buildings~~. Should the value of Developer's onsite **Apartment** art be less than one percent (1%) of the total building valuation for **each of the two Apartment buildings, respectively,** ~~the entire Project as described above~~, then Developer shall pay the City the difference in its entirety prior to issuance of the **final** certificate of occupancy for the ~~150th Townhome constructed as part of the Project~~ **respective Apartment building**.

b. **Townhomes.** Prior to issuance of **any certificates of occupancy** ~~the first building permit~~ for the Townhomes ~~and prior to issuance of building permits for each of the two Apartment buildings~~, the Developer shall pay a public art fee equal to one percent (1%) of the total building valuation for all Townhomes ~~and each of the two Apartment buildings (i.e., all Project buildings)~~ as determined by the City's Building Official in accordance with the Marshall-Swift Valuation Guide per the City Building Official's standard practice ("~~Project~~ **Townhome** Art Fee").

In lieu of paying the **Townhome** ~~Project~~ Art Fee, Developer may incorporate on-site art **("Townhome Art")**, including but not limited to art within the exterior north side of the Project facing the 405 freeway, to the satisfaction of the Director, in which case Developer shall submit a ~~Project~~ **Townhome** Art plan, valuation, and implementation plan to the Director prior to issuance of the first ~~Project building permit~~ **certificate of occupancy for the Townhomes**.

Unless otherwise approved by the Director pursuant to the **Townhome** Art implementation plan, Developer's on-site **Townhome** art ~~which corresponds to a particular building~~ shall be installed prior to the issuance of a **final** certificate of occupancy for the **Townhomes** ~~respective buildings and art that does not correspond to any particular building shall be installed within six months following issuance of the certificate of occupancy for the first Apartment building constructed as part of the Project. Individual art valuations shall be submitted for each Project building prior to issuance of building permits for the respective buildings~~. Should the value of Developer's onsite **Townhome** art be less than one percent (1%) of the total building valuation for **Townhomes** ~~the entire Project as described above~~, then Developer shall pay the City the difference in its entirety prior to issuance of the certificate of occupancy for the 150th Townhome constructed as part of the Project.

2. Subsection (i) is hereby added to Section 9.1 of the Development Agreement, entitled "Types of Insurance," and shall read as follows:

"i. **Partial Transfer of Property**. In the event Developer transfers ownership of any portion of the Property ("Transferred Property"), Developer and the owner of the Transferred Property shall each be responsible for compliance with this Section 9, but shall only be required to insure their respective parcels, rather than the entire Property. To the extent Developer or owner of the Transferred Property perform work on portions of the Property not owned by them, then such party shall be responsible to comply with Section 9 for the full extent of the work area until the work is completed."

3. The following is hereby added to Section 3.10 of the Development Agreement, entitled "**Traffic Signal**," and shall read as follows:

"In addition to the traffic signal at the Project entry location on Avalon Boulevard between the I-405 interchange and 213th Street, Developer is responsible to signalize the currently stop-controlled Grace Avenue/213th Street intersection per MMRP PDF-TRA-2 ("Grace Avenue/213th Street Signalization"). In lieu of signalizing the intersection, Developer may pay an in-lieu fee of Seven Hundred and Fifty Thousand Dollars ($750,000) to the City. The in-lieu fee shall be payable as follows: One Hundred Thousand Dollars ($100,000) shall be due prior to issuance of any Building Permit for the Project and Six Hundred and Fifty Thousand Dollars ($650,000) shall be due prior to issuance of any Certificate of Occupancy for the Project in order to satisfy the requirement. The amount prescribed shall be used by the City to upgrade the Grace Avenue/213th Street intersection."

**Revisions to DOR COAs**

1. DOR COA 16 is modified as follows:

"Adequate measures shall be taken to eliminate odors during the grading operations ~~as a result of the site being a former landfill~~ to the satisfaction of the Community Development Director."

2. DOR COA 19 is modified as follows:

"Prior to issuance of ~~any~~ building permits **for the Apartments**, the Applicant shall provide **onsite** landscape plans **for the Apartments** to the Planning Division for review and approval ~~for all areas of the site~~. **Prior to issuance of building permits for the Townhomes, the Applicant shall provide onsite landscape plans for the Townhomes to the Planning Division for review and approval**. ~~In lieu of installation of the entire landscaping on the site prior to issuance of occupancy permits, t~~The Community Development Director ~~may~~ **shall** approve a phased landscape installation plan **as submitted by the developer of the Townhome and/or Apartment component of the project** to ~~require~~ **allow** a phased installation of landscaping prior to issuance of occupancy permits of various portions of the project."

3. DOR COA 20 is modified as follows:

"Installation, maintenance, and repair of all **onsite** landscaping shall be the responsibility of the Applicant **for each phase**. ~~All landscaping shall be installed prior to issuance of any occupancy permits. The Community Development Director may approve a phased installation of the landscaping.~~"

4. DOR COA 28 is modified as follows:

"Prior to the issuance of any building permits **for the Apartments**, the applicant shall submit a Wall and Fence Plan **for the Apartments** to the Planning Division for review and approval by the Planning and Building Divisions ~~for all areas of the site~~. **Prior to the issuance of any building permits**

**for the Townhomes, the applicant shall submit a Wall and Fence Plan for the Townhomes to the Planning Division for review and approval by the Planning and Building Divisions.** The plans shall indicate materials colors and height of proposed and existing walls and fences and shall include a cross section of walls and fences indicating adjacent grades. Walls shall be consistent with the requirements of the Specific Plan. In lieu of construction of ~~all~~ walls and fences ~~on the site~~ prior to issuance of any occupancy permits, the Community Development Director ~~may~~ **shall** approve a phased construction plan for the walls and fences **as submitted by the developer of the Townhome and/or Apartment component of the project to allow for phased construction of all walls and fences** prior to issuance of occupancy permits of various portions of the project."

5. DOR COA 31 is modified as follows:

"Two sets of **onsite** lighting plans **for the Apartments** are to be drawn, stamped, and signed by a licensed lighting consultant **or an electrical engineer** and submitted and approved by the Planning Division prior to the issuance of building permits **for the Apartments**. **Two sets of onsite lighting plans for the Townhomes are to be drawn, stamped, and signed by a licensed lighting consultant or an electrical engineer and submitted and approved by the Planning Division prior to the issuance of building permits for the Townhomes**. In lieu of installation of all lights on the site prior to issuance of any occupancy permits, the Community Development Director ~~may~~ **shall** approve a phased installation plan **as submitted by the developer of the Townhome and/or Apartment component of the project to allow** for the **phased installation of** lights prior to issuance of occupancy permits of various portions of the project."

6. DOR COA 33 is modified as follows:

"Prior to issuance of any ~~building~~ **certificates of occupancy** ~~permits~~ **for the Apartments**, the Applicant shall submit a Comprehensive Sign Program **for the Apartments** consistent with the Specific Plan and Development Agreement. **Prior to issuance of any certificates of occupancy for the Townhomes, the Applicant shall submit a Comprehensive Sign Program for the Townhomes consistent with the Specific Plan and Development Agreement. The Comprehensive Sign Program shall reflect a consistent design aesthetic between the Apartments and the Townhomes.**

7. DOR COA 34 is modified as follows:

"Prior to issuance of ~~building~~ **any certificates of occupancy** ~~permits~~, the Applicant shall provide plans to the Planning Division for approval of entry monument signage consistent with the Comprehensive Sign Program."

8. DOR COA 35 is modified as follows:

"Prior to issuance of ~~building~~ **any certificates of occupancy** ~~permits~~ **for the Apartments**, the Applicant shall provide plans to the Planning Division for approval of Directional/wayfinding signage consistent with the Comprehensive Sign Program **for the Apartments**. **Prior to issuance of any certificates of occupancy for the Townhomes, the Applicant shall provide plans to the Planning Division for approval of Directional/wayfinding signage consistent with the Comprehensive Sign Program for the Townhomes**."

9. DOR COA 36 is modified as follows:

"~~All signs shall be installed prior of any issuance of occupancy permits.~~ In lieu of installation of all signage on the site prior to issuance of any occupancy permits, the Community Development Director ~~may~~ **shall** approve a phased installation plan **as submitted by the developer of the Townhome and/or**

**Apartment component of the project to allow** for the **phased installation of** signs prior to issuance of occupancy permits of various portions of the project."

10. DOR COA 44 is modified as follows:

"The Applicant shall comply with all conditions and requirements imposed in connection with recordation of the Final Tract Map by the County of Los Angeles Department of Public Works and/or the ~~County of Los Angeles Department of Public Works~~ **City**, as approved by the City Engineer."

11. DOR COA 50 is modified as follows:

"All infrastructure necessary to serve the ~~Project~~ **Townhomes** (water, sewer, storm drain, and street improvements) **shall be in operation prior to issuance of any certificates of occupancy for the Townhomes. All infrastructure necessary to serve either Apartment building (water, sewer, storm drain, and street improvements) shall be in operation prior to the issuance of certificates of occupancy for the respective Apartment building.** ~~shall be in operation prior to the issuance of Certificate of Occupancy of any building~~."

12. DOR COA 54 is modified as follows:

"Applicant shall submit digital copies of SUSMP/LID/NPDES/Grading Plans ~~concurrently~~ to City of Carson, Engineering Services Department ~~and Los Angeles County Building & Safety Division~~."

**Revisions to VTTM COAs**

1. VTTM COA 10 is modified as follows:

"No demolition or grading permits shall be issued prior to Vesting Tentative Tract Map clearance by City of Carson Building & Safety. ~~Los Angeles County Department of Public Works~~.

2. VTTM COA 17 is modified as follows:

"Adequate measures shall be taken to eliminate odors during the grading operations ~~as a result of the site being a former landfill~~ to the satisfaction of the Community Development Director."

3. VTTM COA 31 is modified as follows:

"A Construction bond for all work to be done within the public right of way shall be submitted and approved by Engineering Division prior to ~~approval of the Final Map~~ **issuance of building permits for the Project**. **No offsite work shall take place prior to posting the Construction bond.**"

4. VTTM COA 33 is modified as follows:

"CC&R's (covenants, conditions, and restrictions) **or REAs (reciprocal easement and maintenance agreements)** to address drainage responsibilities are required."

5. VTTM COA 41 is modified as follows:

"The Developer shall submit drainage/grading plans, prepared by a registered Civil Engineer, to ~~Los Angeles County Department of Public Works (LACDPW)~~ **City of Carson Building&Safety** and obtain approvals to the satisfaction of ~~LACDPW~~ **City of Carson Building&Safety**.

6. VTTM COA 44 is modified as follows:

"The Developer shall send a print of the development map to the County Sanitation District, to request for annexation. The request for annexation **for the Townhomes must be approved (and annexation granted) prior to issuance of any certificates of occupancy for the Townhomes. The request for annexation for either of the Apartment buildings** must be approved **(and annexation granted)** prior to ~~Final Map approval~~ **issuance of any certificates of occupancy for the respective Apartment Building**."

7. VTTM COA 63 is modified as follows:

"The Developer shall annex the area to the L.A. County Lighting Maintenance District, for the purpose of operating and maintaining the streetlights to be installed **but only for offsite streetlights in the public right of way**. The annexation shall be to the satisfaction of L.A. County and shall be completed prior to the issuance of **final** Certificate**s** of Occupancy. Additional streetlight installation or upgrade to existing streetlights may be required as part of the annexation."

8. VTTM COA 65 is modified as follows:

"Prior to the issuance of Building Permit the proposed development is subject to the following:

a) Per City of Carson ordinance 5809 developer shall comply with all applicable Low Impact Development (LID) requirements and shall include Best Management Practices necessary to control storm water pollution from construction activities and facility operations to the satisfaction of the City Engineer.

b) Developer shall apply for a Construction Activities Stormwater General Permit from the State Water Resources Control Board.

c) Developer shall provide a copy of an approved SWPPP stamped by **the City and/or the** Los Angeles County Building and Safety Division along with WDID number.

d) Developer shall provide contact information of the Qualified Storm Water Developer (QSD) and/or Qualified SWPPP (Storm Water Pollution Prevention Plan) Developer (QSP) of the site to **Roland Jen** via E-mail **RJen**@Carson.ca.us

e) Developer shall submit digital copies of the LID/NPDES/Grading Plans, hydrology and Hydraulic analysis concurrently to City of Carson, Engineering Services Department and Building & Safety Division. Deliver copy to **Roland Jen** via E-mail **RJen**@Carson.ca.us

f) Developer shall complete, sign and return the Stormwater Planning Program LID Plan Checklist form and return to City of Carson Engineering Services Division.

9. VTTM COA 71 is modified as follows:

"Comply with the approved hydrology study, or the latest revision, to the satisfaction of **City of Carson Building&Safety.** ~~Public Works~~"

10. VTTM COA 73 is modified as follows:

"The final map must be approved by the **City of Carson Building&Safety's designated geotechnical expert** ~~Geotechnical and Materials Engineering Division (GMED)~~ to assure that all geotechnical requirements have been properly depicted."

11. VTTM COA 74 is modified as follows:

"Submit a grading plan **to the City of Carson Building&Safety** for approval. Also, acknowledgment and/or approval from all easement holders may be required."

12. VTTM COA 75 is modified as follows:

"Prior to approval of the grading plan, provide approval of the latest hydrology study ~~by~~ **to** the City **of Carson Building&Safety**."

13. VTTM COA 77 is modified as follows:

"**In order to ensure access to the Townhomes from Avalon Blvd through the Apartment lots, the rough grading of the site shall be completed for the entire Property. Notwithstanding the foregoing, the inspection and signoff of individual rough-graded pads for the Townhomes and/or either Apartment lot, respectively, can be obtained for individual rough-graded pads during the rough-grading effort.** Prior to approval of the grading plan, provide approval of any permits and/or letter of non-jurisdiction from all State and Federal Agencies as applicable. These agencies may include; the State of California Regional Water Quality Control Board, the State of California Department of Fish and Wildlife, the State of California Department of Conservation, the California Geologic Energy Management, and the Army Corps of Engineers."

14. VTTM COA 87 is modified as follows:

"Prior to **any** ~~final~~ **certificates of occupancy** ~~map approval~~, enter into an agreement with the **local**-franchised cable TV operator (if an area is served) to permit the installation of cable in a common utility trench or provide documentation that steps to provide cable TV to the proposed subdivision have been initiated."

15. VTTM COA 89 is modified as follows:

"Comply with the street lighting conditions as stipulated in the enclosed memorandum dated February 1, 2022, from Los Angeles County Public Works, Traffic Safety and Mobility Division (Street Lighting Section), and/or any of the City's street lighting requirements. **Per the memorandum, the County Lighting Districts cannot assume responsibility for streetlights located within gated communities or on roadways designated as a private or private-future street.**"

16. VTTM COA 94 is modified as follows:

"~~Remove existing buildings prior to final map approval.~~ Demolition permits and final sign-off from the building inspector are required from the local Building and Safety office."

17. VTTM COA 97 is modified as follows:

"The ~~project area~~ **installation of new street lights in the public right of way** will ~~be~~ required ~~to~~ **annexation into** ~~be annexed to~~ the County Lighting Maintenance District serving the City of Carson.

Therefore, submit a street lighting plan showing existing **offsite** streetlight**s in the right of way** for the annexation process prior to **issuance of any** certificate**s** of occupancy."

18. VTTM COA 98 is modified as follows:

"Upon submittal of street lighting plans(s) (**offsites** ~~subdivision~~ only), the applicant shall comply with conditions of annexation in order for the light districts to pay for the future operation and maintenance of the streetlights. The annexation and the levy of assessment require the approval of the Board of Supervisors prior to Public Works approving street lighting plans. It is the sole responsibility of the owner/developer of the project to have all street lighting plans approved prior to ~~the map recordation~~ **the issuance of any certificates of occupancy**. The required street lighting improvements shall be the sole responsibility of the owner/developer of the project and the installation must be accepted per approved plans. If phasing of the project is approved, the required street lighting improvements shall be the sole responsibility of the owner/developer of the project and will be made a condition of approval to be in place for each phase."

19. VTTM COA 99 is modified as follows:

"Provide business/property owners name, mailing address, site address, Accessor Parcel Number, and Parcel Boundaries in Auto CADD format to be developed to Street Lighting Section **for any new street lights in the public right of way prior to issuance of any certificates of occupancy**."

20. VTTM COA 100 is modified as follows:

"Submit map of the proposed project including any roadways condition for streetlights to Street Lighting Section **for any new street lights in the public right of way prior to issuance of final certificates of occupancy**. Contact Street Lighting Section for map requirements and/or questions at (626) 300-4726."

21. VTTM COA 101 is modified as follows:

"~~The area~~ **Prior to issuance of any certificates of occupancy, any new offsite street lights** must be annexed into the lighting district and all streetlight**s** in the project, or the approved phase of the project, must be constructed according to **City** ~~Public Works~~ approved plans. The contractor shall submit one complete set of "as-built" plans. The lighting district can assume the responsibility for the operation and maintenance of the **offsite** streetlights by July 1st of any given year, proved the above conditions are met, all streetlight**s** in the project, or approved project phase, have been constructed per **City** ~~Public Works~~ approved plan and energized and the owner/developer has requested a transfer of billing **for offsite street lights** at least by January 1st of the previous year. The transfer of billing could be delayed one or more years if the above conditions are not met."

22. VTTM COA 102 is deleted in its entirety and replaced with "Intentionally Omitted."

**Revisions to MMRP**

1. Mitigation Measure PDF-HAZ-1, "Soil Management Plan," is modified as follows, on the grounds that the Los Angeles County Health Hazardous Materials Division (HHMD) is not accepting voluntary submittals of Soil Management Plans, so this mitigation measure is infeasible as originally written:

| Mitigation Measure | Implementation Timing | Agency Responsible for Monitoring |
|---|---|---|
| **PDF-HAZ-1. Soil Management Plan.** The Project Applicant shall prepare a Soil Management Plan that is submitted and approved by the ~~Los Angeles County Health Hazardous Materials Division (HHMD)~~ **City**. The Soil Management Plan shall be prepared by a qualified environmental consultant, consistent with the findings of the June 17, 2019 AEC Phase I and II Environmental Site Assessment, or any updates to that report.<br><br>• During construction, the contractor shall implement the Soil Management Plan. If unidentified or suspected contaminated soil or groundwater evidenced by stained soil, noxious odors, or other factors, is encountered during site preparation or construction activities on any portion of the Project site, the contractor shall stop in the excavation area of potential contamination and notify **the Los Angeles County Health Hazardous Materials Division** (HHMD). Following oversight from HHMD, the applicant shall retain a qualified professional to collect soil samples to confirm the type and extent of contamination if deemed necessary by HHMD.<br><br>• If contamination is confirmed to be present, any further ground disturbing activities within areas of identified or suspected contamination shall be conducted according to a site-specific health and safety plan, prepared by a California state licensed professional. The contractor shall follow all procedural direction given by HHMD and in accordance with the Soil Management Plan to ensure that suspect soils are isolated, protected from runoff, and disposed of in accordance with transport laws and the requirements of the licensed receiving facility.<br><br>• If contaminated soil or groundwater is encountered and identified constituents exceed human health risk levels, ground disturbing activities shall not recommence within the contaminated areas until remediation is complete and a "no further action" letter is obtained from the appropriate regulatory agency or direction is otherwise given that construction can commence. The Project Applicant shall submit the "no further action" letter or equivalent notification to the City prior to resumption of any ground disturbing activity on the relevant portion of the Project site. | **Approval of Soil Management Plan**<br><br>Prior to issuance of grading permit(s)<br><br>**Implementation of Soil Management Plan**<br><br>During any ground disturbing activities | ~~Los Angeles County Health Hazardous Materials Division~~/City of Carson/ **Los Angeles County Health Hazardous Materials Division (Only If Needed)** |

In accordance with Development Agreement Section 12.4, this hereby modifies and memorializes the changes requested by the Applicant and identified above.

Sincerely,

Saied Naaseh
Director of Community Development
City of Carson

CITY OF CARSON

May 8, 2025

Mr. Dave Rand
Rand Paster & Nelson, LLP
633 West Fifth Street
Suite 5880
Los Angeles, CA 90071

Imperial Avalon, LLC
4276 Katella Avenue, #231
Los Alamitos, CA 90720
Attn: Darren Embry

**Re: Imperial Avalon Mixed-Use Project – Approval of Minor Modifications to Development Agreement**

Dear Mr. Rand:

Imperial Avalon LLC (the "Applicant") has requested to further modify the proposed mixed use development project consisting of 764 multifamily units, 351 townhomes, and 10,000 square feet of commercial uses at 21207 South Avalon Boulevard ("Property") in the City of Carson ("City") (the "Project").

In accordance with Development Agreement Section 12.4, which permits the Community Development Director to ministerially grant certain "Minor Project Modifications" to the "Agreement, the Project and/or the Development plans," we have reviewed your requested modifications and hereby grant the following Minor Modifications to the following provision of the Development Agreement.

Deleted text is in ~~strikethrough~~ and added text is in **bold underline**.

**Revisions to Development Agreement**

1. Subsection (a) of Section 3.5, entitled "Apartment and Townhome Enhanced Sustainability and Environmental Benefits," is hereby revised as follows:

~~"a. **Photovoltaic Panels.** Developer shall incorporate approximately 35,000 square feet (total) photovoltaic panels located on the rooftop of the Project parking structure for the Apartments and shall provide conduit and wiring for an additional twenty thousand (20,000) square feet of Apartment building rooftop to accommodate potential future solar panel installation.~~

**a. Refrigerant Requirements and Additional EVCS Requirements for Apartments.**

**(i) Notwithstanding the first paragraph of Section 3.5, the Apartments shall comply with Sections 1104.6.1 through 1104.6.2.4, inclusive,**

**of the 2022 California Mechanical Code ("CMC") (including the July 1, 2024 Supplement), attached to the Minor Modification dated May 8, 2025, as Exhibit A, which specify the type of refrigerant to be used for air conditioning systems and provide enhanced environmental benefits as compared to the requirements of the 2019 CMC.**

**(ii) In addition to the 15% of Apartment building parking spaces requiring full EVCS with EV chargers installed under subsection 3.5(b), an additional five percent (5%) of the Apartment parking spaces (otherwise required to only have conduit and wiring for future EVCS installation under subsection 3.5(b)) shall have full EVCS with EV chargers installed.**

**(iii) Notwithstanding any other provision of this subsection 3.5(a), the Apartments shall comply with the 2019 California Building Code requirements, including requirements related to providing conduit to ensure the Apartments are solar-ready for future installations. Where there are inconsistencies between the requirements of this Agreement and the 2019 California Building Code, Developer shall comply with the requirements of the 2019 California Building Code with the Los Angeles County Amendments.**

**(iv) This subsection 3.5(a) does not alter or modify any requirement applicable to the Townhomes."**

***

In accordance with Development Agreement Section 12.4, this hereby modifies and memorializes the changes requested by the Applicant and identified above.

Sincerely,

Saied Naaseh
Director of Community Development
City of Carson

# Exhibit A

## Excerpts from 2022 California Mechanical Code (including the July 1, 2024 Supplement)



***1104.6 Group A2L Refrigerants for Human Comfort.*** *High-probability systems using Group A2L refrigerants for human comfort applications shall comply with this section. [ASHRAE 15:7.6]*

***1104.6.1 Refrigerant Concentration Limits.*** *Occupied spaces shall comply with the releasable charge limitations of the equipment listing and ASHRAE 15. Unoccupied spaces with refrigerant containing equipment, not including continuous piping or tubing, shall comply with the releasable charge limitations of the equipment listing or Section 1104.6.4. {ASHRAE 15:7.6.1-7.6.1.2}*

***1104.6.2 Listing and Installation Requirements.*** *Refrigeration systems shall be listed and shall be installed in accordance with listing, the manufacturer's instructions, and any markings on the equipment restricting the installation. [ASHRAE 15:7.6.2]*

***1104.6.2.1 Nameplate.*** *The nameplate required by Section 1115.5 shall include a symbol indicating that a flammable refrigerant is used, as specified by the product listing. [ASHRAE 15:7.6.2.1]*

***1104.6.2.2 Labeling.*** *A label indicating a flammable refrigerant is used shall be placed adjacent to service ports and other locations where service involving components containing refrigerant is performed, as specified by the product listing. [ASHRAE 15:7.6.2.2]*

***1104.6.2.3 Refrigerant Detection Systems.*** *Refrigerant detection systems shall be in accordance with the listing and ASHRAE 15.*

***1104.6.2.4 Refrigerant Concentration Above Limit.*** *When the refrigerant detection system senses a refrigerant exceeding its setpoint, the following actions shall be taken:*

*(1) The supply air fan of the equipment shall activate with a minimum airflow rate specified by the manufacturer.*

*(2) Turn off the compressor and all other electrical devices, excluding the control power transformers, control systems, and the supply air fan. The supply air fan shall continue to operate for at least five minutes after the refrigerant detection system has sensed a drop in the refrigerant concentration below the value specified in Section 1104.6.6(b).*

*Exception: The compressor operation shall not be turned off when the compressor operation reduces the leak rate or the total amount of released refrigerant to the indoor space.*

*(3) Any device that controls airflow located within the product or in ductwork that supplies air to the occupied space shall be fully open. Any device that controls airflow shall be listed.*

*(4) Mitigation action required by the equipment listing shall be initiated {ASHRAE 15:7.6.2.4}*

[TO BE PLACED ON CITY OF CARSON LETTERHEAD]

Mr. Dave Rand
Rand Paster & Nelson, LLP
633 West Fifth Street
Suite 5880
Los Angeles, CA 90071

Imperial Avalon, LLC
659 North Robertson
West Hollywood, CA 90069
Attn: Chris Trueblood

**Re: Imperial Avalon Specific Plan Development Agreement – Minor Modification Approval**

Dear Mr. Rand:

As you know, the City of Carson ("City") and Imperial Avalon LLC ("Developer") entered into an Amended and Restated Settlement Agreement and Mutual Release ("Amended Settlement Agreement") on January 14, 2025, concerning Development Agreement No. 23-19 ("Development Agreement") for a proposed mixed use development project at 21207 South Boulevard in the City. Furthermore, Exhibit "B" of Planning Commission Resolution No. 22-244 imposes Conditions of Approval on Imperial Avalon Site Plan and Design Review No. DOR 1803-19 ("DOR COAs"), and Exhibit "C" of Planning Commission Resolution No. 22-244 imposes Conditions of Approval on Imperial Avalon Vesting Tentative Tract Map 83157 ("VTTM COAs"). Section 12.4 of the Development Agreement permits the Community Development Director to ministerially grant "Minor Project Modifications" to the "Agreement, the Project and/or the Development Plans." The City hereby grants Minor Modifications to the Development Agreement, DOR COAs, and VTTM COAs, as stated below.

The Minor Modifications granted below are an amendment and restatement of the Minor Modifications approved by the City on February 28, 2024 ("February 28, 2024, Minor Modifications"). As of the date of this letter, the February 28, 2024, Minor Modifications shall be null and void and such modifications shall be replaced in their entirety with the Minor Modifications in this letter.

Section 3.1, "Comprehensive Development Agreement Fee," is deleted in its entirety and replaced with the following:

> "3.1 Carson Park and Recreation Subsidy. Three Hundred Thousand Dollars ($300,000) shall be due from Developer to City upon the Effective Date of this Agreement, and shall be used by City to subsidize Carson residents' fees and costs associated with park and recreational registration, trophies and jerseys "Carson Park and Recreation Subsidy"). As of the effective date of the January 2026 Minor Modification to this Agreement, Developer and City acknowledge and agree that this obligation has been satisfied."

Section 3.2, "Nonprofit Entity," is deleted in its entirety.

Section 3.3, "Affordable Housing Benefit," is deleted in its entirety.

The first paragraph of Section 3.5, "Apartment and Townhome Enhanced Sustainability and Environmental Benefits," is modified as follows:

> Developer shall agree to incorporate the following enhanced sustainability and environmental benefits into construction of the Apartments and Townhomes for the Project. In recognition of the enhanced environmental benefits provided by the Project Apartments and Townhomes through this Section 3.5, the City shall subject the Project Apartments and Townhomes to the 2019 California Building Standards Code as applicable to and/or adopted by the City pursuant to CMC Article VIII, provided Developer submits a conceptual design package to the City's Building & Safety Department on the City Building & Safety Department's Online Plan check (BSOP) website prior to January 1, 2023. The conceptual design package shall consist of a schematic set of development and design plans for all disciplines with sufficient detail for the City to undertake zoning compliance review, but shall not be required to include landscaping, structural, energy, accessibility, mechanical, electrical and/or plumbing related plans and design, provided it is within the City's legal discretion to deem such submittal complete as necessary to facilitate such grandfathering under applicable state and local law. A full set of construction plans with all disciplines shall be submitted prior to January 1, 2024 for the Apartments and Townhomes. ~~If the Building & Safety plan check application validity period of one year plus the two six-month extension periods thereafter expire prior to issuance of the required permits/approvals (expected to include, without limitation, rough grading approval and building pad/foundation permits), then the plans will expire and will be required to meet the code in effect at the time of such expiration, and new plan check fees will be required~~. **Upon submittal of the full set of construction drawings, the Project shall be subject to the 2019 California Building Standards Code for the Term of this Agreement as specified in Section 2.1. It is further acknowledged that Developer submitted the necessary construction documents to the City's Building & Safety Department on or before December 11, 2023, prior to the January 1, 2024 deadline, and has therefore fully satisfied the requirements as set forth above in this modified Section 3.5 to subject the entire Project (Townhomes and Apartments) to the 2019 California Building Standards Code for the duration of the Term of the Agreement.**

Section 3.7, "Publicly Accessible Pedestrian Bridge," is deleted and replaced in its entirety with the following:

> "**3.7 Existing Pedestrian Bridge.** Immediately following approval of the Minor Modification of the Development Agreement, Developer and City shall immediately commence good faith negotiations on improving the existing bridge that crosses the Dominguez Channel and connects Avalon Boulevard with Lenardo

Boulevard ("Bridge"). Such negotiations will focus on improvements to the Bridge that will a) create and enhance the pedestrian access between Avalon Boulevard and Lenardo Boulevard; and b) improve the aesthetic appearance of the Bridge and the pedestrian connection between Avalon Boulevard and Lenardo Boulevard. Subject to any requisite approvals from any authority with jurisdiction over the Bridge, such improvements will include, but are not limited to, the following:

(1) removing the existing "PEDESTRIANS PROHIBITED" sign to allow for pedestrian access;

(2) restriping, or otherwise improving the aesthetic appearance of the Bridge;

(3) improving the pedestrian experience between Avalon Boulevard and Lenardo Boulevard through the installation of new landscaping and amenities such as additional wayfinding signage, etc. or other aesthetic improvements (collectively, the "**Improvements**").

Developer shall contribute an aggregate amount up to but not to exceed one hundred and twenty-five thousand dollars ($125,000), unless otherwise agreed to by Developer and City in a separate agreement, towards the Improvement no later than five (5) years from the Effective Date of this Agreement."

Section 3.11, "Carson and Avalon 405 Interchange Landscaping Improvement," is deleted in its entirety.

Section 3.12, "Purple Pipe," is deleted in its entirety.

Section 4.7, "Role of Project Development Approvals," as amended by the approved May 24, 2023, Minor Modification, is further amended as follows:

Except as provided within this Agreement, the Project Development Approvals shall exclusively control the uses of the Property, the density or intensity of use, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes and the design, improvement, and construction standards and specifications applicable to the Project. Pursuant to Government Code Section 66452.6, the term of any tentative map for the Property or any portion thereof, if any, filed within the term of this Agreement shall automatically be extended for the term of this Agreement, as amended by the Project Development Approvals. In addition, Developer shall have the right to commence Project construction of both the Apartment buildings and the Townhomes within the Project prior to the recordation of an approved final subdivision map No. 83157 if applicable permits have been issued and all other applicable conditions of approval and Development Agreement provisions are met. However, the approved final subdivision map must be recorded prior to issuance of any certificates of occupancy (temporary or otherwise) for the Project and prior to any occupancy of the Project. Following recordation of the final subdivision map, Temporary certificates of occupancy shall be issued if buildings or units are deemed

to have satisfied all applicable fire-life safety components and systems to safely occupy the completed areas as determined by the Building Official. ~~No final certificates of occupancy shall be issued prior to satisfaction of (without limitation) all conditions of approval that are required to be completed "Prior to Issuance of Occupancy Permits" and all applicable Development Agreement provisions. Neither the Apartment lots nor the Apartment buildings may be individually sold prior to recordation of the approved final subdivision map No. 83157.~~ **To support development of the Project, which may be completed in phases, the City hereby agrees that final certificates of occupancy shall also be issued for each individual Project phase. The anticipated phases consist of: (i) the Townhome component, (ii) the first Apartment building and (iii) the second Apartment building, respectively.** Any tentative map prepared for the Project subdivision will comply with Government Code Section 66473.7.

Subsections (c) and (d) of Section 5.8, "Fees, Taxes, and Assessment," are amended as follows:

c. **Master Community Facilities District.** On November 7, 2018, the City formed a Master CFD entitled City of Carson Community Facilities District No. 2018-01 (Maintenance and Services) (the "**Master CFD**") for the purpose of funding the maintenance of public infrastructure within the area of the Master CFD which is within the City's jurisdictional boundaries (the "**Services**") **including areas that voluntarily annex into the Master CFD**. ~~In light of the substantial Developer contributions towards infrastructure, parks and other public benefits as set forth in Article 3 of this Agreement secured through payment of the Development Agreement Fee, it is understood that~~ **The Parties agree that** the City will not **require** annex**ation** the Property or the Project into the Master CFD for the life of the Project. This provision shall survive the Term of the Agreement.

d. **Development Impact Fee.** ~~In light of the substantial Developer contributions towards infrastructure, parks and other public benefits as set forth in Article 3 of this Agreement secured through payment of the Development Agreement Fee, it is understood that the City will not assess~~ **Developer shall be required to pay any** Development Impact Fees **that would normally be required in the execution of the Project** pursuant to **City** Ordinance No. 19-1931. **In accordance with State law and Carson Municipal Code Section 11504, the City has determined that Developer shall not be required to pay Development Impact Fees for any Townhome or Apartment building until the issuance of a certificate of occupancy for the specific Townhome or Apartment building or up to twelve (12) months following the issuance of the building permit for the specific Townhome or Apartment building, whichever occurs first. The deferred Development Impact Fee payments will be based on the fees in effect at the time of actual payment, including any applicable fee offsets Developer might be entitled under the Carson Municipal Code. This provision is intended to be, and shall be implemented so as to be, consistent with the requirements of Government Code Section 66007, and is not intended to confer a unique or special benefit on the Project that it would not otherwise be entitled to under State law and the Carson Municipal Code.** ~~Accordingly, the Parties understand,~~

~~acknowledge and agree that no credits or reimbursements will be available to Developer pursuant to Ordinance No. 19-1931 or any provision of the CMC (as may be amended) to offset, reduce or refund any portion of the Development Agreement Fee.~~

DOR COA 17 is amended as follows:

~~The Development Agreement Fee and all other fees~~ **Fees** shall be paid in appropriate times as specified in the Development Agreement and the Conditions of Approval.

DOR COA 59 is replaced with the following:

***Interim Development Impact Fee:*** In accordance with Article XI (Interim Development Impact Fee Program) of the Carson Municipal Code ("CMC"), the applicant, property owner, and/or successor to whom this project approval is assigned ("Developer") shall be responsible for payment of one-time interim development impact fees ("IDIF") at the applicable rate detailed below for each unit of residential development constructed for the project. If the project increases or decreases in regards to the number of units constructed, the total IDIF amount will be adjusted accordingly at the applicable rate.

Per CMC 11504, the IDIF shall be paid prior to the issuance of a certificate of occupancy for the specific Townhome or Apartment building or up to twelve (12) months following the issuance of the building permit for the specific Townhome or Apartment building, whichever occurs first, and the applicable IDIF rate (detailed below) shall be that in effect at the time of such payment, unless the timing or requirements of payment is modified by applicable State Law. No certificate of occupancy shall be issued prior to the full payment of the required IDIF amount, which payment shall be made in one lump sum installment. IDIF amounts/rates are subject to adjustment every July 1st based on State of California Construction Cost Index (Prior March to Current March Adjustment), per CMC Section 11500.

IDIF amounts/rates for residential development have been set at $16,918.01 per unit (1 bedroom or studio) and $21,147.52 (All Other) per unit for Fiscal Year 2025-26, effective July 1, 2025, through June 30, 2026. Affordable Housing Units are exempted from IDIF. Based on these rates, the Developer would be responsible for a total payment of IDIF for the proposed project in an amount calculated as follows: the applicable rate per unit multiplied by 1,115, for 1,115 Residential Units, subject to any applicable fee offsets to which Developer might be entitled under Carson Municipal Code Sections 11800-11804.

However, if the IDIF for the project is not paid in 2025-26 fiscal year (i.e., by June 30, 2026), a new IDIF rate/amount will apply for the period of July 1, 2026, through June 30, 2027, based on the IDIF rate for Fiscal Year 2026-27, and so on for subsequent fiscal year(s). The fee for Fiscal Year 2026-2027 IDIF has not yet been determined.

To understand the requirements in more detail, please visit the City's IDIF webpage at: https://ci.carson.ca.us/communitydevelopment/IDIFProgram.aspx and/or contact James Nguyen at jnguyen@carsonca.gov or 310-952-1700 ext. 1310.

***Notice of Imposition of Interim Development Impact Fees; Right to Protest***
Pursuant to CMC Section 11503, Developer is hereby notified of the IDIF imposed on the project, as described and in the amount stated above. In accordance with Government Code Section 66020, Developer may protest the imposition of the IDIF on the project by complying with the requirements set forth in CMC 11900. Any such protest shall be filed at the time of the approval or conditional approval of a development, as that phrase is defined in CMC 11901(A).

If you have any questions or comments regarding this notice, please contact James Nguyen at jnguyen@carsonca.gov or (310) 952-1700 ext. 1310.

VTTM COA 18 is amended as follows:

~~The Development Agreement Fee and all other fees~~ **Fees** shall be paid in appropriate times as specified in the Development Agreement and the Conditions of Approval.

VTTM COA 103 is replaced with the following:

***Interim Development Impact Fee:*** In accordance with Article XI (Interim Development Impact Fee Program) of the Carson Municipal Code ("CMC"), the applicant, property owner, and/or successor to whom this project approval is assigned ("Developer") shall be responsible for payment of one-time interim development impact fees ("IDIF") at the applicable rate detailed below for each unit of residential development constructed for the project. If the project increases or decreases in regards to the number of units constructed, the total IDIF amount will be adjusted accordingly at the applicable rate.

Per CMC 11504, the IDIF shall be paid prior to the issuance of a certificate of occupancy for the specific Townhome or Apartment building or up to twelve (12) months following the issuance of the building permit for the specific Townhome or Apartment building, whichever occurs first, and the applicable IDIF rate (detailed below) shall be that in effect at the time of such payment, unless the timing or requirements of payment is modified by applicable State Law. No certificate of occupancy shall be issued prior to the full payment of the required IDIF amount, which payment shall be made in one lump sum installment. IDIF amounts/rates are subject to adjustment every July 1st based on State of California Construction Cost Index (Prior March to Current March Adjustment), per CMC Section 11500.

IDIF amounts/rates for residential development have been set at $16,918.01 per unit (1 bedroom or studio) and $21,147.52 (All Other) per unit for Fiscal Year 2025-26, effective July 1, 2025, through June 30, 2026. Affordable Housing Units are exempted from IDIF. Based on these rates, the Developer would be responsible for a total payment of IDIF for the proposed project in an amount calculated as follows: the applicable rate per unit

multiplied by 1,115, for 1,115 Residential Units, subject to any applicable fee offsets to which Developer might be entitled under Carson Municipal Code Sections 11800-11804.

However, if the IDIF for the project is not paid in 2025-26 fiscal year (i.e., by June 30, 2026), a new IDIF rate/amount will apply for the period of July 1, 2026, through June 30, 2027, based on the IDIF rate for Fiscal Year 2026-27, and so on for subsequent fiscal year(s). The fee for Fiscal Year 2026-2027 IDIF has not yet been determined.

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If you have any questions or comments regarding this notice, please contact James Nguyen at jnguyen@carsonca.gov or (310) 952-1700 ext. 1310.

***

In accordance with Development Agreement Section 12.4, this hereby modifies and memorializes the changes identified above. The Minor Modifications made herein shall be binding on the Developer and on Developer's successors and assigns.

Sincerely,

_____
City of Carson

**CITY OF CARSON**

**PLANNING COMMISSION**

**RESOLUTION NO. 26-2898**

**A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF CARSON RECOMMENDING THE CARSON CITY COUNCIL APPROVE AMENDED AND RESTATED DEVELOPMENT AGREEMENT NO. 23-19 BETWEEN THE CITY OF CARSON, IMPERIAL AVALON, LLC, AND LENNAR HOMES OF CALIFORNIA, LLC FOR A MIXED-USE PROJECT LOCATED AT 21207 SOUTH AVALON BOULEVARD**

**WHEREAS**, California Government Code Sections 65864 *et seq*. authorize the City of Carson ("City") to enter into binding development agreements with persons having a legal or equitable interest in real property for the development of such property in order to establish certain development rights, for the purpose of strengthening the public planning process, encouraging private participation and comprehensive planning and identifying the economic costs of such development; and

**WHEREAS,** on December 13, 2022, the City adopted Ordinance No. 22-2222, approving Development Agreement No. 23-19 ("Development Agreement") between the City and Imperial Avalon LLC ("Imperial Avalon") for a mixed-use residential and commercial project on the real property located at 21207 South Avalon Boulevard in the City ("Property"). The Development Agreement was recorded in the Official Records of Los Angeles County on June 4, 2024, as Document No. 20240361857. The project consists of 764 multi-family residential units in two buildings of up to four stories each, 351 attached/detached and stacked flat townhome units of up to three stories each, 111,581 square feet of publicly accessible open space (including a minimum 22,859 square foot park), and 10,000 square feet of commercial restaurant space (the "Project"); and

**WHEREAS,** the City also conditionally approved the following entitlements for the Project in December 2022 (collectively, the "Original Entitlements"): (1) certification of an Environmental Impact Report (SCH No. 2021010116; the "EIR") for the Project; (2) General Plan Amendment ("GPA") No. 105-19, to change the land use designation of the Property from Regional Commercial/Low Density Residential to Urban Residential; (3) Specific Plan ("SP") No. 21-19, the Imperial Avalon Specific Plan ("IASP"), to establish the development standards and permitted uses for the Property; (4) Zone Change ("ZCC") No. 188-19, to change the Property's zoning from Commercial Automotive/RM-8-D to Imperial Avalon Specific Plan; (5) Site Plan Review and Design Review ("DOR") No. 1803-19; and (6) Vesting Tentative Tract Map ("VTTM") No. 83157; and

**WHEREAS,** Exhibit "B" of Planning Commission Resolution No. 22-244 imposes Conditions of Approval on the DOR No. 1803-19 ("DOR COAs"), and Exhibit "C" of Planning Commission Resolution No. 22-244, as amended by City Council Resolution No. 22-242, imposes Conditions of Approval on VTTM No. 83157 ("VTTM COAs"); and

**WHEREAS,** the Development Agreement and some of the Original Entitlements, including the DOR COAs and VTTM COAs, were subsequently amended through multiple Minor Modifications requested by Imperial Avalon and approved by the City pursuant to Section 12.4 of the Development Agreement, as follows (collectively, the "Approved Minor Modifications"):

- A Minor Modification approved on May 24, 2023, made revisions to the Development Agreement and resolved an inconsistency between the Specific Plan and the approved Project plans regarding the required Project building setback from the 405 freeway.

- A Minor Modification approved on February 28, 2024, made revisions to the Development Agreement. This Minor Modification was approved pursuant to a Settlement Agreement and Mutual Release between the City and Imperial Avalon, which became effective on or about February 28, 2024 ("Original Settlement Agreement").

- A Minor Modification approved on June 10, 2024, made revisions to the Development Agreement, the DOR COAs, the VTTM COAs, and the Mitigation Monitoring and Reporting Program Table included as Section 4.2 in the Final EIR ("MMRP").

- A Minor Modification approved on May 8, 2025, made revisions to the Development Agreement.

- A Minor Modification approved on _____, made revisions to the Development Agreement, the DOR COAs, and the VTTM COAs. This Minor Modification was approved pursuant to an Amendment and Restatement of the Original Settlement Agreement, which became effective on _____, and replaced the Minor Modification approved on February 28, 2024; and

**WHEREAS,** Lennar Homes of California, LLC, ("Lennar") purchased from Imperial Avalon the portion of the Property that will contain the Townhomes ("Transferred Property") and entered into a Partial Assignment and Assumption Agreement with Imperial Avalon, recorded on October 1, 2024 ("A/A Agreement"), under which Imperial Avalon assigned to Lennar and Lennar assumed from Imperial Avalon all of Imperial Avalon's rights and obligations regarding the Transferred Property, including rights and obligations under the Development Agreement, as more fully described in the A/A Agreement. As shown in Exhibit C of the A/A Agreement, the City consented to the assignment and assumption effectuated through the A/A Agreement, as required by Section 11 of the Development Agreement. Imperial Avalon and Lennar are referred to herein below as the "Developer"; and

**WHEREAS,** in or about December of 2025, Developer submitted to the City an application to amend and restate the Development Agreement, in order to incorporate and integrate the changes made through the Approved Minor Modifications into one consolidated document, with no new substantive modifications, pursuant to Government Code Sections 65864 through 65869.5 ("Amended and Restated Development Agreement"); and

**WHEREAS,** after notice of the time, place and purpose of a public hearing was duly given, the City's Planning Commission held a public hearing and heard testimony and considered all

factors both oral and written on the 27th day of January, 2026, to consider Developer's application for the Amended and Restated Development Agreement. Having done so, the Planning Commission now sees fit and intends to recommend City Council adoption of an appropriate ordinance to approve the Amended and Restated Development Agreement; and

**WHEREAS,** all legal prerequisites to the adoption of this Resolution have occurred.

**NOW, THEREFORE, THE PLANNING COMMISSION OF THE CITY OF CARSON, CALIFORNIA, HEREBY FINDS, RESOLVES AND ORDERS AS FOLLOWS:**

**SECTION 1.** The Planning Commission finds that the foregoing recitals are true and correct, and the same are incorporated herein by this reference as findings of fact.

**SECTION 2**. The Planning Commission finds that Amended and Restated Development Agreement was adequately assessed by the EIR and that there are no circumstances requiring additional environmental review. Specifically, no substantial changes are proposed in the Project that will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; no substantial changes have occurred with respect to the circumstances under which the Project will be undertaken which will require major revisions to the EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; and there is no new information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the EIR was certified as complete, that shows any of the following: (A) the Project will have one or more significant effects not discussed in the EIR; (B) significant effects previously examined will be substantially more severe than shown in the EIR; (C) mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the Project, but the Project proponents decline to adopt the mitigation measure or alternative; or (D) mitigation measures or alternatives which are considerably different from those analyzed in the EIR would substantially reduce one or more significant effects on the environment, but the Project proponents decline to adopt the mitigation measure or alternative.

Furthermore, the approval of the Amended and Restated Development Agreement is covered by the common sense exemption that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Here, it can be seen with certainty that there is no possibility that the amendments made to the Amended and Restated Development Agreement may have a significant effect on the environment because the amendments simply integrate modifications to the Development Agreement that were previously approved and are primarily related to the payment of fees and the provision of public benefits, rather than making physical changes to the Project or Project site.

Consequently, the Planning Commission finds that approval of the Amended and Restated Development Agreement does not require any additional environmental review.

**SECTION 3.** The Planning Commission hereby finds as follows:

A. The Amended and Restated Development Agreement merely incorporates and integrates the changes made through the Approved Minor Modifications into one consolidated document. It does not make or effect any new substantive changes to the Development Agreement or the Project, as all substantive changes that are reflected in the Amended and Restated Development Agreement as compared to the original Development Agreement have been previously approved through the Approved Minor Modifications.

B. The Amended and Restated Development Agreement is consistent with the provisions of Government Code Sections 65864 through 65869.5.

C. The Amended and Restated Development Agreement provides for a project that is located within an area suitable for the proposed use and is in conformance with the General Plan as amended by GPA No. 105-19, and the Imperial Avalon Specific Plan (SP No. 21-19), which is also the zoning designation for the Property pursuant to Zone Change (ZCC) No. 188-19, which changed the zoning map designation for the Property from Commercial Automotive/RM-8-D to Imperial Avalon Specific Plan.

D. The Amended and Restated Development Agreement provides for a public convenience through significant monetary benefits which will contribute directly or indirectly to programs and services designed to provide for the health, safety and welfare of the public, thereby exhibiting good land use practices. The Agreement specifies the Community Benefits in Article 3. The Project will also be required to pay Development Impact Fees as provided in Section 5.8(d) of the Agreement.

E. The Amended and Restated Development Agreement will not be detrimental to the public's health, safety and general welfare, nor will it adversely affect the orderly development or property values for the Property or areas surrounding it.

F. The Amended and Restated Development Agreement is in compliance with the procedures established by the City as required by Government Code Section 65865(c).

G. The Amended and Restated Development Agreement in Article 6 provides for an annual review to ensure good faith compliance with the terms of the Agreement, as required in Section 65865.1 of the Government Code.

H. The Amended and Restated Development Agreement specifies the contents required by Government Code Section 65865.2, including without limitation the 15-year term in Section 2.1 and other project details in Recital F.

I. The Amended and Restated Development Agreement includes conditions, terms, restrictions and requirements for development of the Property in Article 4 (without limitation) and as permitted in Section 65865.2 of the Government Code.

J. The Amended and Restated Development Agreement contains provisions in Article 7 for termination of the Agreement prior to expiration of its term.

K. The Amended and Restated Development Agreement provides for amendment or cancellation in whole or in part, by mutual consent of the parties to the Agreement or their successors in interest, as required in Section 65868 of the Government Code.

L. The Amended and Restated Development Agreement is in the best public interest of the City and its residents and will achieve a number of City objectives including ensuring compatibility of the development and use of the site with surrounding uses, providing much needed housing in a variety of housing types, and helping achieve a sustainable balance of residential and non-residential development and a balance of traffic circulation through the City, in furtherance of General Plan goals and objectives.

M. The Amended and Restated Development Agreement supports General Plan goal LU-6: A sustainable balance of residential and nonresidential development and a balance of traffic circulation throughout the City. The Project promotes a balanced mix of residential development and ground floor, pedestrian-serving commercial restaurant uses. The Project provides for the inclusion of commercial restaurant uses that would provide easy access to a variety of foods within close proximity to existing and future residential communities. Consistent with policy LU-6.3, the Specific Plan specifically promotes a mixed-use zone that encourages pedestrian-oriented mobility. For the same reasons, the Amended and Restated Development Agreement also supports SP No. 21-19.

N. The Amended and Restated Development Agreement supports General Plan goal LU-7: adjacent land uses that are compatible with one another. The proposed development of the Project, with its gradual sensitive transition toward the western edge of the Property, is compatible with the adjacent single-family residential Grace Avenue neighborhood. For the same reasons, the Amended and Restated Development Agreement also supports SP No. 21-19.

O. The Amended and Restated Development Agreement supports General Plan goal LU-8: Promote mixed-use development where appropriate. The Project is proposed as part of the City's ongoing effort to develop new mixed-use corridors. The Property is located within close proximity to the Carson Street mixed-use corridor and The District at South Bay proposed development. For the same reasons, the Agreement also supports SP No. 21-19.

P. The Amended and Restated Development Agreement supports General Plan goal LU-15: promote development in Carson which reflects the "Livable Communities" concepts. The Project encourages the location of housing, jobs, shopping, services, and other activities within easy walking distance of each other. By providing the potential for a variety of housing types, various multifamily unit types which may include senior housing, and for-sale townhome units, the Project also supports Policy LU-15.2 which seeks to maintain a diversity of housing types to enable citizens from a wide range of economic levels and age groups to live in Carson. For the same reasons, the Amended and Restated Development Agreement also supports SP No. 21-19.

Q. The Amended and Restated Development Agreement supports General Plan Housing Element Goal 2: encourage the development of a variety of housing to meet needs of the broad spectrum of the community, with a particular emphasis on multifamily housing, and Goal 4: Promote housing opportunities for lower-income households and seniors. By providing a mix

of unit types ranging from studios to four-bedroom homes, the project facilitates diversity of housing types and prices, supporting a wide variety of housing needs and promoting a multi-generational community. Additionally, the Project supports Goal 4 by providing an exclusive pre-lease period for seniors and establishing a quota for units rented to seniors, recognizing that senior populations benefit from various types of housing models and from providing independent senior housing to meet the diverse needs of Carson's and the region's aging population.

R. The Amended and Restated Development Agreement provides, in Section 4.7, that any tentative map prepared for the Project subdivision will comply with Government Code Section 66473.7.

S. The provisions of the Amended and Restated Development Agreement are consistent with the General Plan, as amended by GPA No. 105-19, and all applicable specific plans.

**SECTION 4.** Based on the foregoing, the Planning Commission hereby recommends that the City Council adopt an appropriate ordinance to approve the Amended and Restated Development Agreement, which is attached hereto as Exhibit "A" and incorporated herein by this reference.

**SECTION 5.** This Resolution shall be effective immediately upon its adoption.

**SECTION 6.** The Secretary of the Planning Commission shall certify to the adoption of this Resolution.

**PASSED, APPROVED** and **ADOPTED** this 27th day of January 2026.

**DIANNE THOMAS**
**CHAIRPERSON**

**ATTEST:**

**LAURA GONZALEZ**
**SECRETARY**

**Exhibit A: Amended and Restated Development Agreement [to be attached]**

RECORDING REQUESTED BY AND
WHEN RECORDED MAIL TO:

City of Carson
701 E Carson Street
Carson, CA 90745
Attn: Planning Manager

SPACE ABOVE THIS LINE RESERVED FOR RECORDER'S USE

# DRAFT

## AMENDED AND RESTATED DEVELOPMENT AGREEMENT

This Amended and Restated Development Agreement ("**Agreement**") is entered into on the ____ day of _____, ~~2022~~ 2026 ("**Execution Date**"), by and between the City of Carson, a municipal corporation of the State of California ("**City**"), ~~and~~ IMPERIAL AVALON, LLC, a California limited liability company ("~~**Developer**~~**Imperial Avalon**"), and LENNAR HOMES OF CALIFORNIA, LLC, a California limited liability company ("**Lennar**"). Imperial Avalon and Lennar are referred to collectively in this Agreement as "**Developer**". The City and Developer shall be referred to jointly within this Agreement as the "Parties" and individually as a "Party."

## RECITALS

A. *The Development Agreement Statute.* California Government Code Sections 65864 *et seq*. ("**Development Agreement Law**") authorizes cities to enter into binding development agreements with persons having a legal or equitable interest in real property for the development of such property, all for the purpose of strengthening the public planning process, encouraging private participation, and comprehensive planning and identifying the economic costs of such development.

B. *Orderly Development; Public Benefits.* The City Council finds that this Agreement is in the best public interest of the City and its residents, adopting this Agreement constitutes a present exercise of the City's police power, and this Agreement is consistent with the City's General Plan. This Agreement and the proposed Project will achieve a number of City objectives, including the orderly development of the Property and the provision of public benefits, or funds therefor, to the City and its residents.

C. *The Property.* Developer owns the property located at 21207 South Avalon Boulevard in the City of Carson, County of Los Angeles, State of California (APNs 7337-001-025, 7337-001-026, 7337-001-027, 7337-001-028, and 7337-001-029) ("**Property**"). At the time of

the approval of the Original DA, t~~T~~he General Plan land use designation for the Property ~~is~~ was Regional Commercial and Low Density Residential and the Property ~~is~~ was zoned Commercial Automotive (CA) and RM-8-D (Design Overlay).

D. *Developer's Interest in the Property*. Developer currently owns the Property and as such, possesses the requisite equitable interest in the Property under Government Code Section 65865 that allows the Parties to enter into this Agreement. ~~The City is currently in the process of updating its General Plan. The Carson General Plan 2040 Update identifies the site as "Downtown Mixed Use."~~

~~C. The Property is currently improved and in operation as a mobilehome park, known as Imperial Avalon Mobile Estates ("**Imperial Avalon**" or the "**Park**").~~

~~D.~~E. *The Park*. At the time of the approval of the Original DA, the Property was improved and in operation as a mobilehome park, known as Imperial Avalon Mobile Estates ("**Park**"). ~~Developer~~ Imperial Avalon filed an application for approval of Relocation Impact Report No. 05-20 ("**RIR**") related to Park closure pursuant to CMC Section 9128.21 in early 2020 (the "**Closure Application**"). The Closure Application was heard and conditionally approved by the City's Planning Commission on May 13, 2020, via adoption of Planning Commission Resolution No. 20-2695. Following an administrative appeal to the City Council, on July 7, 2020, the City Council adopted City Resolution No. 20-113, affirming the Planning Commission's decision subject to imposition of added and modified conditions as set forth in the "Amended Conditions of RIR No. 05-20" which are attached to said resolution ("the **RIR Conditions**"), and specifying the earliest possible date of Park closure (i.e., the earliest date when residents may be compelled to vacate the Park) as January 1, 2022, subject to issuance of the required notices of termination of tenancy (the "**Closure Approval**"). As required by the Closure Approval, Developer has executed and recorded on title to the Property a "Declaration of Lease Covenants, Conditions and Restrictions Applicable to Park Closure Pursuant to Government Code § 27281.5" (the "**Option C Covenant**"). Furthermore, Developer ~~has~~ agreed to provide certain enhancements to the relocation impact mitigation measures set forth in the RIR Conditions for the benefit of the displaced Park residents, which enhancements were set forth in a letter from ~~Developer~~ Imperial Avalon to the Park residents dated September 9, 2021, ~~and Developer may agree to provide further enhancements at a later date~~without limitation (collectively, the "**Enhancements**"). At the time of the approval of the Original DA, Developer had~~s~~ not yet issued the required 6-month notice of termination of tenancy, which wa~~i~~s a prerequisite of Park closure. As of the Effective Date thereof, some residents remained in the Park while some had~~ve~~ vacated the Park voluntarily pursuant to early termination agreements entered into with the Developer in accordance with the RIR Conditions, and implementation/satisfaction of the RIR Conditions remained~~s~~ pending and underway. Developer still intended~~s~~, and had~~s~~ the right, to issue the requisite 6-month notice of termination of tenancies and thereafter close the Park during the effective period of the Closure Approval, ~~although the precise dates of such actions are not currently known~~and later did so. It is understood and was decided by the City in acting upon the Closure Application that the Closure Application and the City's review and decision thereon was exempt from California Environmental Quality Act ("**CEQA**") review and did not constitute a "project" within the meaning of CEQA. On that basis, a Notice of Exemption was filed in connection with the Closure Approval on July 17, 2020, and no CEQA-related

challenges were filed within the applicable 35 day statute of limitations period.

~~E.~~F. *The Project.* Developer desires to re-develop the Property as a mixed-use residential and commercial development (the "**Project**"). The Project consists of 764 multi-family residential units within two buildings of up to four stories (or sixty-eight feet, six inches [68'6"] each, including at least one parking structure per building, each on their own lot on the eastern portion of the Property (the "**Apartments**"), 351 attached/detached and stacked flat townhome units of up to three stories (or thirty-eight feet, six inches [38'6"]) each, all located on another lot on the western portion of the Property (the "**Townhomes**"), for a total of 1,115 residential units and a density of 41 dwelling units per acre, 111,581 square feet of publicly accessible open space (including a minimum 22,859 square foot park), and 10,000 square feet of commercial space, all of which shall be restaurant use(s). To that end, on October 3, 2019, ~~Developer~~ Imperial Avalon filed a development permit application with the City (Master Redevelopment Project No. PL10044) seeking various entitlements to develop the Project (collectively, the "**Development Application**"). The City determined the Development Application was complete on December 24, 2019.

~~F.~~G. *Project EIR and Entitlements.* ~~—~~ The City is the lead agency, within the meaning of the ~~California Environmental Quality Act, Public Resources Code § 21000 *et seq.* ("~~CEQA~~")~~, for purposes of conducting environmental review of the Project. The City ~~finds~~ has found and ~~determines~~ determined that all actions required of City precedent to approval of ~~this~~ the Original DA ~~Agreement have been~~were duly and regularly taken. In accordance with the requirements of ~~the California Environmental Quality Act (Public Resources Code § 21000, *et seq.* ("~~CEQA~~")~~, appropriate studies, analyses, reports, documents, and errata were prepared and considered by the Planning Commission and the City Council. The Planning Commission, after a duly noticed public hearing on November 21, 2022, certified the Environmental Impact Report ("**EIR**") and adopted a Statement of Overriding Considerations for the Project in accordance with CEQA. The Project is identified in the EIR as Alternative 3 and is fully assessed in the EIR and the errata thereto.

~~G.~~H. ~~*Project*~~ *Original Planning Commission Approvals.* On the same day, the Planning Commission, after giving notice pursuant to the CMC and Government Code §§ 65090, 65091, 65092 and 65094, held a public hearing on the Development Application, and following the hearing, adopted Planning Commission Resolution No. 22-~~2846~~244, which: (i) made CEQA findings and determinations as referenced above; (ii) conditionally approved Site Plan and Design Overlay Review ("**DOR**") No. 1803-19 and Vesting Tentative Tract Map ("**VTTM**") No. 83157 for the Project subject to City Council approval of General Plan Amendment ("**GPA**") No. 105-19 (changing the General Plan land use designation for the Property from Regional Commercial/Low Density Residential to Urban Residential), Specific Plan ("**SP**") No. 21-19 (Imperial Avalon Specific Plan), Zone Change ("**ZCC**") No. 188-19 (changing the Property zoning from Commercial Automotive (CA)/Residential, multifamily – 8 units per acre (RM-8) with a Design Overlay to Imperial Avalon Specific Plan [IASP]), and Development Agreement ~~("**DA**")~~ No. 23-19 ("**Original DA**") (~~this Agreement,~~ inclusive of the Adopting Ordinance); and (iii) recommended that the City Council approve GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 for the Project (DOR No. 1803-19, VTTM No. 83157, GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 collectively, together with the EIR, the

"**Entitlements**").

~~H.~~I. *Original City Council Approvals*. On December 6, 2022, the City Council, after provision of the public notice required by law, held a public hearing to consider the Development Application and the Planning Commission's actions and recommendations thereon.~~, and f~~ Following the hearing, the City Council: (i) adopted ~~conditionally approved GPA No. 105-19, SP No. 21-19, ZCC No. 188-19, and DA No. 23-19 as set forth in~~ City Council Resolution No. 22-~~2846~~242, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the VTTM and making findings pursuant to CEQA Guidelines Sections 15162-15164, and modifying, pursuant to CMC Section 9173.4(c)(2)(b), the decision of the Planning Commission adopting Planning Commission Resolution No. 22-244 with respect to the conditions of approval of the VTTM, pursuant to Developer's appeal; (ii) adopted City Council Resolution No. 22-243, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the GPA, and approving the GPA; (iii) introduced, and subsequently, on December 13, 2023, adopted, Ordinance No. 22-2221, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the SP and ZCC, conditionally approving the SP, and approving the ZCC; and (iv) introduced, and subsequently, on December 13, 2023, adopted, Ordinance No. 22-2222, making, ratifying and affirming the CEQA findings and the actions of the Planning Commission related to certification of the EIR with respect to approval of the Original DA, and approving the Original DA. ~~The Planning Commission and the City Council have found, on the basis of substantial evidence based on the entire administrative record, that this Agreement is consistent with all applicable plans, rules, regulations and official policies of the City.~~

J. *Original Conditions of Approval*. Exhibit "B" of Planning Commission Resolution No. 22-244 imposes Conditions of Approval on Imperial Avalon Site Plan and Design Review No. DOR 1803-19 ("**DOR COAs**"), and Exhibit "C" of Planning Commission Resolution No. 22-244, as amended by City Council Resolution No. 22-243, imposes Conditions of Approval on Imperial Avalon Vesting Tentative Tract Map 83157 ("**VTTM COAs**"). Exhibit "C" of City Council Ordinance No. 22-2221 imposes Conditions of Approval on SP No. 21-19 ("**SP COAs**").

K. *Modifications to the Original Entitlements.* The Original Entitlements were subsequently amended through Minor Modifications requested by Imperial Avalon and approved by the City pursuant to Section 12.4 of the Original DA, as follows (collectively, the "**Approved Minor Modifications**"):

- A Minor Modification approved on May 24, 2023, made revisions to the Original DA and resolved an inconsistency between the Specific Plan and the approved Project plans regarding the required Project building setback from the 405 freeway.

- A Minor Modification approved on February 28, 2024, made revisions to the Original DA. This Minor Modification was approved pursuant to a Settlement Agreement and Mutual Release between the City and Imperial Avalon, which

became effective on or about February 28, 2024 ("**Original Settlement Agreement**").

- A Minor Modification approved on June 10, 2024, made revisions to the Original DA, the DOR COAs, the VTTM COAs, and the Mitigation Monitoring and Reporting Program Table included as Section 4.2 in the Final EIR ("**MMRP**").

- A Minor Modification approved on May 8, 2025, made revisions to the Original DA.

- A Minor Modification approved on , made revisions to the Original DA, the DOR COAs, and the VTTM COAs. This Minor Modification was approved pursuant to an Amendment and Restatement of the Original Settlement Agreement, which became effective on .

L. *Sale of Portion of the Property*. Lennar purchased from Imperial Avalon the portion of the Property that will contain the Townhomes ("**Transferred Property**") and entered into an Assignment and Assumption Agreement with Imperial Avalon, recorded on October 1, 2024 ("**A/A Agreement**"), under which Imperial Avalon assigned to Lennar and Lennar assumed from Imperial Avalon all of Imperial Avalon's rights and obligations regarding the Transferred Property, including rights and obligations under this Agreement, as more fully described in the A/A Agreement. As shown in Exhibit C of the A/A Agreement, the City consented to the assignment and assumption effectuated through the A/A Agreement, as required by Section 11 of this Agreement.

M. *Application for Amended and Restated Development Agreement.* In or about December of 2025, Developer submitted to the City an application to amend and restate the Original DA, in order to incorporate changes made through the Approved Minor Modifications and to make other revisions to the Original DA contained in this Agreement.

N. *Approval of Amended and Restated Development Agreement*. On January 27, 2026, in accordance with Development Agreement Law, the Planning Commission held a duly noticed public hearing and adopted Resolution 26-2898, recommending that the City Council approve this Agreement. On , 2026, the City Council introduced, and subsequently, on , 2026, adopted, Ordinance No. , making CEQA findings and approving this Agreement. The Planning Commission and the City Council have found, on the basis of substantial evidence based on the entire administrative record, that this Agreement is consistent with all applicable plans, rules, regulations and official policies of the City.

O. *Carson Park and Recreation Subsidy*. The Original DA, in Section 3.1.1, required Developer to pay to the City Three Hundred Thousand Dollars ($300,000) to be used by City to subsidize Carson residents' fees and costs associated with park and recreational registration, trophies, and jerseys ("**Carson Park and Recreation Subsidy**"). City and Developer acknowledge and agree that Developer has paid the Carson Park and Recreation Subsidy to the City in full as of the Execution Date of this Agreement. This provision is omitted from Article 3 of this Agreement only because it has already been satisfied; nothing

herein shall be construed to retroactively rescind, remove or otherwise affect the validity of the original obligation in any way.

P. *Developer's Interest in the Property*. Developer currently owns the Property and as such, possesses the requisite equitable interest in the Property under Government Code Section 65865 that allows the Parties to enter into this Agreement.

Q. *Effect on Original DA and Approved Minor Modifications*. The Parties intend that this Agreement, upon taking effect, shall do the following:

(1) This Agreement shall supersede the Original DA and all amendments to the Original DA made through the Approved Minor Modifications.

(2) Exhibit D shall supersede the DOR COAs and the VTTM COAs, including all revisions made to the DOR COAs and VTTM COAs through the Approved Minor Modifications. Exhibit D also includes the SP COAs, which have not been modified.

~~I.~~(3) Amendments made by the Approved Minor Modifications to Specific Plan No. 21-19 and the MMRP shall remain in full force and effect.

## COVENANTS

NOW, THEREFORE, in consideration of the above recitals and of the mutual covenants hereinafter contained and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

**1. GENERAL DEFINITIONS**.

In addition to those terms defined within the above Recitals and elsewhere within this Agreement, the following terms shall bear the meanings set forth below:

**1.1** "**Adopting Ordinance**" means Ordinance No. 22-2222 approving ~~this Agreement~~the Original DA, introduced on December 6, 2022, and adopted on ~~—~~December 13, 2022.

**1.2** "**Agreement**" means this Amended and Restated Development Agreement, including all of its exhibits.

**1.3** "**Annual Review**" means the annual review of the Developer's performance under this Agreement in accordance with Article 6 of this Agreement.

**1.4** "**Applicable Laws**" means, collectively, the following:

a. The Project Development Approvals.

b. The Existing Land Use Regulations**.**

c. Subsequent Development Approvals.

d. Those Subsequent Land Use Regulations to which Developer has agreed in writing.

e. The Closure Approval and associated covenants and agreements, including without limitation the Option C Covenant and the Enhancements.

**1.5** "**Approval Date**" means the date on which the City Council conducted the second reading of the Adopting Ordinance. That date is ~~—~~December 13, 2022.

**1.6** "**CFD**" means any Community Facilities District that is applicable to the Property and formed pursuant to the Mello Roos Community Facilities Act of 1982.

**1.7** **"City**" means the City of Carson, a California Charter city.

**1.8** "**City Council**" means the City Council of the City of Carson.

**1.9** "**CMC**" means the Carson Municipal Code.

**1.10** "**Conditions of Approval**" means all conditions imposed on the Project by the City, including (without limitation) those recommended by the Los Angeles County Fire Department, as part of the approval of the Project.

**1.11** "**Director**" means the City's Community Development Director, or his or her designee.

**1.12** "**Developer**" means IMPERIAL AVALON, LLC, a California limited liability company, LENNAR HOMES OF CALIFORNIA, LLC, a California limited liability company, and ~~its~~ their successors and assigns to all or any part of the Property.

**1.13** "**Developer's Vested Right**" means Developer's right to complete the Project in accordance with, and to the full extent permitted under, the Applicable Laws and this Agreement, as more fully set forth in Articles IV-V of this Agreement.

**1.14** **"Development"** means the improvement of the Property for the purposes of completing the structures, improvements, and facilities comprising the Project including, but not limited to: grading; the construction of infrastructure related to the Project whether located within or outside the Property; the construction of buildings and structures; and the installation of landscaping and other facilities and improvements necessary or appropriate for the Project, and the maintenance, repair, or reconstruction of any building, structure, improvement, landscaping or facility after the construction and completion thereof.

**1.15** "**Development Approvals**" means all Project-specific non-legislative approvals. Development Approvals include, but are not limited to, plans, maps, permits, site plans, design guidelines, variances, conditional use permits, grading, building, and other similar permits, environmental assessments, including environmental impact reports, and any amendments, addenda or modifications to those matters. "Development Approvals" does not include (i) rules, regulations, policies, and other enactments of general application within the City, (ii) legislative enactments, or (iii) any matter where City has reserved authority under Article 5 of this Agreement.

Development Approvals are not Land Use Regulations.

**1.16** "**Development Plan**" means Developer's plan for completion of the Project in compliance with and to the full extent of the Project Development Approvals and Applicable Laws.

**1.17** "**Effective Date**" means the date on which the Adopting Ordinance becaomes effective, or thirty (30) days after the second reading of the Adopting Ordinance.

**1.18** "**Entitlements**" means this Agreement, and the other Entitlements and approvals listed in Recital HG.

**1.19** "**Exhibit**" means an exhibit to this Agreement, unless otherwise specifically referenced to a different agreement or document. The following exhibits are incorporated into the Agreement by reference as though set forth in full:

| | |
|---|---|
| Exhibit A | Legal description of the Property |
| Exhibit B | Depiction of the Property |
| Exhibit C | Public Open Space Areas |
| Exhibit D | Pedestrian Bridge |
| Exhibit E | Amended and Restated COAs |
| Exhibit FE | Excerpts from 2022 California Mechanical Code (Including the July 1, 2024 Supplement) |

**1.20** "**Existing Land Use Regulations**" means (i) all Land Use Regulations in effect on the Effective Date and (ii) any changes to Land Use Regulations enacted on or after the Approval Date and before the Effective Date for which Developer has provided its written consent to allow those changes to apply to the Project.

**1.21** "**Land Use Regulations**" are laws and regulations enacted through legislative actions of the City Council. Land Use Regulations include ordinances, laws, resolutions, codes, rules, regulations, policies, requirements, guidelines or other actions of City, including but not limited to the City's General Plan and the CMC (including the Carson Zoning Ordinance, Chapter 1 of Article IX of the CMC) which affect, govern or apply to the development and use of the Property, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement, and construction standards and specifications applicable to the Project. "Land Use Regulations" do not include (i) Development Approvals, (ii) regulations relating to the conduct of business, professions, and occupancies generally, (iii) taxes and assessments, (iv) regulations for the control and abatement of nuisances, (v) health and safety regulations, or (vi) any other matter reserved to the City pursuant to Article 5 of this Agreement.

**1.22** **"Mortgage**" means a mortgage, deed of trust, or other security instrument encumbering the Property.

**1.23** "**Mortgagee**" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security device, a lender, or each of their respective successors and assigns.

**1.24** "**Project**" as described this Agreement, means the development of the Property consistent with and to the full extent of the Project Development Approvals and all applicable Land Use Regulations.

**1.25** "**Project Development Approvals**" means all Development Approvals, inclusive of the Entitlements and all Conditions of Approval. Project Development Approvals include, without limitation, all Development Approvals needed or desired by Developer to complete the Project, provided that those Development Approvals are consistent with Developer's Vested Right, this Agreement, and the City's General Plan and the Carson Zoning Ordinance. ~~The Entitlements (minus this Agreement), as examples of Project Development Approvals, have been or are anticipated to be approved, subject to the Conditions of Approval, prior to or in conjunction with the approval of this Agreement.~~

**1.26** "**Property**" means the real property described in Exhibit "A" and shown in Exhibit "B."

**1.27** "**Reservation of Authority**" means the limitations, reservations, and exceptions to Developer's Vested Right set forth in Article 5 of this Agreement.

**1.28** "**Subsequent Land Use Regulations**" means those Land Use Regulations which are both adopted and effective on or after the Approval Date and which are not included within the definition of Existing Land Use Regulations.

**1.29** **"Subsequent Development Approvals"** means all Development Approvals issued subsequent to the Effective Date in connection with development of the Property, which shall include, without limitation, any changes to the Development Approvals.

**1.30** "**Term**" shall have the meaning ascribed to it in Section 2.1, unless earlier terminated as provided in this Agreement.

## 2. TERM & GENERAL COVENANTS.

**2.1** **Term**. The term of this Agreement (the "**Term**") starts on the Effective Date and shall expire 15 years after ~~City's approval of the last of the Entitlements~~December 13, 2022, subject to any early termination provisions described in this Agreement. The Term and expiration date of all Entitlements and Project Development Approvals shall also be extended to 15 years consistent with the Term of this Agreement.

**2.2** **Binding Effect of Agreement**. From and following the Effective Date, actions by the City and Developer with respect to the development of the Property for completion of the Project, including actions by the City on applications for Subsequent Development Approvals affecting the Property, shall be subject to the terms and provisions of this Agreement.

**2.3** **Agreement Runs with the Land**. This Agreement shall be recorded and shall run with the land. Pursuant to Government Code Section 65868.5, the burdens of this Agreement and each of its provisions shall be binding upon, and the benefits of this Agreement shall inure to, all successors in interest to the Parties, including, but not limited to, all parties that enter into lease agreements with Developer for possession of any part of the Property.

**2.4 Covenant Against Discrimination.** The Developer covenants that, by and for itself, its heirs, executors, assigns, and all persons claiming under or through them, that there shall be no discrimination against or segregation of, any person or group of persons on account of race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry in the performance of this Agreement. The Developer shall take affirmative action to ensure that employees are treated during employment without regard to their race, color, creed, religion, sex, marital status, sexual orientation or gender preference, national origin, or ancestry.

**2.5 Construction Timing and Park Closure.** Developer covenants that Project construction will not commence until the existing mobilehome park at the Property (i.e., the Park) has been closed and all remaining Park residents or occupants have vacated the Property. As of the date of this Agreement, Developer and City acknowledge and agree that the Park has been closed and all Park residents or occupants have vacated the Property.

**2.6 Park Closure Application and Covenants.** Developer further acknowledges that nothing in this Agreement is intended to supersede or negate the benefits committed to Park residents (current or former) approved through the separate Closure Approval or associated covenants or agreements, including the Option C Covenant and the Enhancements, which are unrelated to the Project and this Agreement.

**2.7 Original DA and Approved Minor Modifications.**

2.7.1 From and after the effective date of the City ordinance approving this Amended and Restated Development Agreement, the Original DA and all revisions to the Original DA made in the Approved Minor Modifications shall be void and of no further force or effect, and shall be superseded by this Agreement, which is intended as an amendment and restatement of the Original DA.

2.7.2 From and after the effective date of the City ordinance approving this Amended and Restated Development Agreement, the DOR COAs and VTTM COAs and all revisions to the DOR COAs and VTTM COAs made in the Approved Minor Modifications shall be replaced in their entirety by the Amended and Restated DOR COAs and Amended and Restated VTTM COAs in Exhibit ~~E~~D of this Agreement.

~~**2.6**~~2.7.3 Notwithstanding section 2.7.1 and 2.7.2, all revisions to Specific Plan No. 21-19 and the MMRP made through the Approved Minor Modifications shall remain in full force and effect.

## 3. DEVELOPER'S OBLIGATIONS AND COMMUNITY BENEFITS.

As consideration for the granting of Developer's Vested Right in accordance with Article 4 below and subject to the City's Reservation of Authority set forth in Article 5 below, Developer shall do all of the following:

~~**3.1 Comprehensive Development Agreement Fee**~~

~~In lieu of the Developer and the Project opting into Citywide Community Facilities District No. 2018-01 ("CFD") (estimated to have a net present value over the life of this Agreement of~~

approximately fourteen million six hundred fifty-eight thousand three hundred sixty-two dollars ($14,658,362.00) and paying Development Impact Fees pursuant to Ordinance No. 19-1931 (estimated to be approximately thirteen million one hundred twenty-seven thousand fourteen dollars ($13,127,014.00) based on current Project features), Developer shall pay a Development Agreement Fee totaling thirty million fifteen thousand three hundred seventy-six dollars ($30,015,376.00) (the "Development Agreement Fee") (this includes an additional fee of $2,000 per residential unit multiplied by 1,115 units even if fewer units are constructed pursuant to Section 12.5 (equal to two million two hundred thirty thousand dollars ($2,230,000.00)). Developer shall have the right, in its sole and absolute discretion, to pay the Development Agreement Fee as prescribed below or cause the Development Agreement Fee contributions and payments to be made by a nonprofit entity in accordance with the terms prescribed by this Agreement. Except as otherwise provided for the Carson Park and Recreation Subsidy and the Initial DA Fee Payment in Sections 3.1.1-3.1.2, the amounts prescribed below shall be paid either by the Developer or the nonprofit entity at the City's direction toward specific programs, projects or uses within the following categories: (i) park, recreational and open space site acquisition, facility development and maintenance, (ii) City infrastructure improvements, maintenance and upgrades, and (iii) community recreational benefits and subsidies ("Development Agreement Fee Categories"). The Development Agreement Fee payments are limited to the amounts and subject to the schedule set forth below, unless the Developer and City agree to an earlier payment date, and shall be paid directly from the Developer or the nonprofit entity to the City:

3.1.1 Three hundred thousand dollars ($300,000.00) shall be due upon the Effective Date of this Agreement, and shall be used by City to subsidize Carson residents' fees and costs associated with park and recreational registration, trophies and jerseys ("Carson Park and Recreation Subsidy").

3.1.2 Five million dollars ($5,000,000.00) shall be due prior to issuance of a grading permit for the Project ("Initial DA Fee Payment"). The City shall have the option to use the Initial DA Fee Payment in whole or in part for low income housing including but not limited to maintenance and upgrades to, and assistance with the preservation of, existing mobilehome parks located throughout the City.

3.1.3 Five million dollars ($5,000,000.00) shall be due prior to issuance of a building permit for the first Townhome to be constructed within the Project.

3.1.4 Four million dollars ($4,000,000.00) shall be due prior to issuance of a building permit for the first Apartment building to be constructed within the Project, and a second payment of four million dollars ($4,000,000.00) shall be due upon issuance of a building permit for the second Apartment building to be constructed within the Project, and a third payment of four million dollars ($4,000,000.00) shall be due upon issuance of a building permit for the 50th Townhome building to be constructed within the Project.

3.1.5 Five million dollars ($5,000,000.00) shall be due within six months following issuance of a certificate of occupancy for the first Apartment building to be constructed within the Project.

3.1.6. Two million seven hundred fifteen thousand three hundred and seventy-six dollars ($2,715,376.00) shall be due prior to issuance of a building permit for the 150th Townhome to be constructed within the Project.

3.2 Nonprofit Entity

In the event that the payments outlined in Section 3.1 are made by a nonprofit, such nonprofit will be formed pursuant to Internal Revenue Code Section 501(c)(3) and will be authorized to manage and distribute Development Agreement Fee funds for the purposes described in Section 3.1 ("Nonprofit").

~~Developer shall provide City with copies of all documents related to the creation and ongoing operation of the Nonprofit, including but not limited to the governing instruments, the application(s) for tax exemption under federal and state law, any exemption approvals, and annual tax forms. City shall not be obligated to review and/or approve any such documents or filings. Developer is solely responsible for the accuracy and timely filing of all such documents and shall obtain its own tax advice.~~

~~Developer shall comply with all federal and state laws governing the creation and operation of the Nonprofit. If Developer receives notice from the IRS or State of a suspension or revocation of nonprofit status or any other issue, Developer shall inform City immediately of the notice and the affirmative steps Developer will take to cure any suspension or revocation or other issue.~~

~~City does not represent or warrant that the management and distribution of Development Agreement Fee funds by the Nonprofit is authorized by federal or state law. Developer and its successors shall be jointly and severally liable with the Nonprofit for payment of the Development Agreement Fee in accordance with this Agreement. If the Nonprofit fails to make Development Agreement Fee payments, or if the Nonprofit's exempt status is suspended or revoked, Developer shall make the Development Agreement Fee payments prior to the issuance of the permits and certificates described in Section 3.1.~~

~~3.3 Affordable Housing Benefit~~

~~The City, by its General Plan and state law, is committed to increasing its supply of affordable housing. Prior to the issuance of a certificate of occupancy for the first Apartment building constructed on the Property, the Developer, or a related/affiliated entity approved by the Director and jointly and severally liable with Developer (and subject to Section 3.3.4 below), shall perform one of the following affordable housing public benefit options, the selection of which shall be in its sole and absolute discretion: (i) commit, via execution and recordation on title to the Property of a deed restriction in a form acceptable to the City Attorney, to reserve at least 125 units of lower income housing, including 41 units of Extremely Low Income (<30% of Area Median Income ["**AMI**"]), 41 units of Very Low Income (30-50% AMI), and 43 units of Low Income (51-80% AMI) (all of the foregoing affordable housing categories collectively, "**Lower Income Housing**," or "**LIH**"), onsite within the Project; (ii) commit, via execution and recordation on title to the below-referenced (in this Section and Sections 3.3.1 – 3.3.2) offsite-location of a deed restriction in a form acceptable to the City Attorney, to construct or convert (from existing units) 125 units of new LIH at an off-site location elsewhere in the City, which off-site location is subject to approval of the Director, and which units must be in excess of any affordable housing requirements otherwise required for the project site within which they will be constructed; or (iii) pay an in lieu affordable housing fee equal to $11.61 per square foot of the Project's gross residential floor area for the Apartments and Townhomes. If in any case where the Developer provides only a portion of the 125 Lower Income Housing units referenced above, Developer may satisfy the balance of the affordable housing obligation by paying a proportionately-reduced in lieu fee payment. For example, if Developer provides seventy-five (75) percent of the 125 Lower Income units, then the balance of the affordable housing obligation may be satisfied by paying twenty-five (25) percent of the required in lieu fee payment.~~

~~3.3.1 Should Developer or the related/affiliated entity elect to satisfy the affordable housing obligation set forth in Section 3.3(ii) above by constructing or converting 125 units of new LIH offsite at another Director-approved location within the City ("**Offsite Affordable Units**"), Developer or the affiliated/related entity shall have five years from the Effective Date of this Agreement to either: (i) in the case of construction, obtain a building permit and commence construction within said timeframe, and thereafter diligently pursue the construction to completion as determined by the Director in his reasonable discretion; or (ii) in the case of conversion, fully complete the conversion of the Offsite Affordable Units such that the units are ready and approved for occupancy (with the deed restriction in place as required above). Developer shall not satisfy this obligation by converting any existing housing units that are rented at or below Lower Income Housing levels (i.e., that are already affordable to any household at or below 80% AMI), even if such existing units are not deed restricted. If Developer elects to convert existing units, evidence must be provided to the Director for approval in the form of rent history demonstrating that the existing units to be converted are all above all the Lower Income Housing~~

~~restricted rent levels at the time of conversion.~~

~~3.3.2 For any avoidance of doubt, if Developer or its related/affiliated entity elects to construct the Offsite Affordable Units within "Cell 1" of the District at South Bay Specific Plan area, then the 125 Offsite Affordable Units must be in excess of the current State Surplus Land Act requirement that 25 percent of the total number of units be constructed on that property for affordable housing. Should Developer or the related/affiliated entity elect to provide Section 3.3(ii) Offsite Affordable Units but fail to comply with any of the applicable timing requirements set forth in Section 3.3.1, then Developer or the related/affiliated entity shall, within thirty (30) days of such failure, pay the City the applicable affordable housing in lieu fee set forth in Section 3.3(iii) above.~~

~~3.3.3 If the Developer ever fails to pay the in-lieu affordable housing fee within thirty (30) days of it becoming due, whether such fee becomes due pursuant to Section 3.3(iii) or Section 3.3.2, a daily penalty of one thousand dollars ($1,000.00) shall be assessed subject to the notice and cure provisions of Section 7.2 of this Agreement.~~

~~3.3.4 The Developer shall remain fully and ultimately responsible to perform any obligation undertaken by a related/affiliated entity pursuant to this Section 3.3.~~

**3.1 Senior and Veteran Housing.**

~~3.2~~

~~3.2.1~~ Prior to issuance of a Certificate of Occupancy, the Developer shall prepare, submit to the City for review, and implement a veterans and senior citizen marketing and outreach program for the Project's Apartment units, subject to the prior written approval of the Director, which approval shall not be unreasonably withheld, conditioned or delayed. Developer shall exclusively market the Project's Apartment units to veterans and their families as well as senior citizens (over the age of 55) who currently reside within the City or the general South Bay area for a period of sixty (60) days prior to the units being offered for rent to the general public ("Exclusive Pre-Lease Period"). During this Exclusive Pre-Lease Period, Developer shall make best efforts to lease units to local veterans and their family members and senior citizens provided that all such applicants meet generally applicable leasing qualifications and criteria imposed by Developer. Nothing in this Agreement shall require that any of the Project Apartment units be actually occupied by local veterans or their family members. Further, nothing in this Agreement requires more than 83 of the total 1,115 units to be leased to senior citizens at a given time.

3.1.1

~~3.2.2~~3.1.2 Commencing two years after issuance of a certificate of occupancy for the second Apartment building, Developer shall demonstrate to the City on an annual basis that at least eighty-three (83) of the Project's Apartment units are rented to senior citizens (defined as fifty-five (55) years or older) ("Project Senior Obligation"). The Developer shall demonstrate it is meeting the Project Senior Obligation by providing rental information or other form of occupancy verification confirming that seniors are renting at least 83 of the Project Apartment units. For every unit less than 83 that is not rented to a senior citizen as defined in this Section 3.14.2, Developer shall provide the City a payment equivalent to the average in place amount of an equivalent floorplan market rate unit occupied in the Project ("Project Senior Obligation Payment"). The Project Senior Obligation Payment shall be used for low income and senior housing services throughout the City.

**~~3.3~~3.2 Apartment and Townhome Enhanced Sustainability and Environmental Benefits.** Developer shall agree to incorporate the following enhanced sustainability and

environmental benefits into construction of the Apartments and Townhomes for the Project. In recognition of the enhanced environmental benefits provided by the Project Apartments and Townhomes through this Section 3.2~~5~~, the City shall subject the Project Apartments and Townhomes to the 2019 California Building Standards Code as applicable to and/or adopted by the City pursuant to CMC Article VIII, provided Developer submits a conceptual design package to the City's Building & Safety Department on the City Building & Safety Department's Online Plan check (BSOP) website prior to January 1, 2023. The conceptual design package shall consist of a schematic set of development and design plans for all disciplines with sufficient detail for the City to undertake zoning compliance review, but shall not be required to include landscaping, structural, energy, accessibility, mechanical, electrical and/or plumbing related plans and design, provided it is within the City's legal discretion to deem such submittal complete as necessary to facilitate such grandfathering under applicable state and local law. A full set of construction plans with all disciplines shall be submitted prior to January 1, 2024 for the Apartments and Townhomes. ~~If the Building & Safety plan check application validity period of one year plus the two six-month extension periods thereafter expire prior to issuance of the required permits/approvals (expected to include, without limitation, rough grading approval and building pad/foundation permits), then the plans will expire and will be required to meet the code in effect at the time of such expiration, and new plan check fees will be required.~~Upon submittal of the full set of construction drawings, the Project shall be subject to the 2019 California Building Standards Code for the Term of this Agreement as specified in Section 2.1. It is further acknowledged that Developer submitted the necessary construction documents to the City's Building & Safety Department on or before December 11, 2023, prior to the January 1, 2024 deadline, and has therefore fully satisfied the requirements as set forth above in this Section 3.2 to subject the entire Project (Townhomes and Apartments) to the 2019 California Building Standards Code for the duration of the Term of the Agreement.

~~a. **Photovoltaic Panels. Developer shall incorporate approximately 35,000 square feet (total) photovoltaic panels located on the rooftop of the Project parking structure for the Apartments and shall provide conduit and wiring for an additional twenty thousand (20,000) square feet of Apartment building rooftop to accommodate potential future solar panel installation.**~~

a. **Refrigerant Requirements and Additional EVCS Requirements for Apartments.**

(i) Notwithstanding the first paragraph of Section 3.2, the Apartments shall comply with Sections 1104.6.1 through 1104.6.2.4, inclusive, of the 2022 California Mechanical Code ("CMC") (including the July 1, 2024 Supplement), attached hereto as Exhibit E~~F~~, which specify the type of refrigerant to be used for air conditioning systems and provide enhanced environmental benefits as compared to the requirements of the 2019 CMC.

(ii) In addition to the 15% of Apartment building parking spaces requiring full EVCS with EV chargers installed under subsection 3.2(b), an additional five percent (5%) of the Apartment parking spaces (otherwise required to only have conduit and wiring for

future EVCS installation under subsection 3.2(b)) shall have full EVCS with EV chargers installed.

(iii) Notwithstanding any other provision of this subsection 3.2(a), the Apartments shall comply with the 2019 California Building Code requirements, including requirements related to providing conduit to ensure the Apartments are solar-ready for future installations. Where there are inconsistencies between the requirements of this Agreement and the 2019 California Building Code, Developer shall comply with the requirements of the 2019 California Building Code with the Los Angeles County Amendments.

(iv) This subsection 3.2(a) does not alter or modify any requirement applicable to the Townhomes.

b. **Enhanced Electric Vehicle Charging Stations ("EVCS").** Developer shall equip a total of fifty percent (50%) of the Project parking spaces with an EVCS benefit, as follows: (a) fifteen percent (15%) of the total Project parking spaces shall be full EVCS, with EV chargers installed; and (b) thirty-five percent (35%) of the total Project parking spaces shall have conduit and wiring to allow for future EVCS installation. The electrical panel for all buildings shall be designed such that it can accommodate full EVCS for 50% of parking spaces for the Project. EVCS spaces shall be assigned and managed in accordance with the parking management plan required per the Conditions of Approval, which may require the Developer to convert the EVCS parking spaces that are initially only provided with conduit and wiring into full EVCS parking spaces (with chargers installed) incrementally over time based on tenant need. All Townhomes shall have 240 volt NEMA 14-50 installed in the garage. All Townhomes shall be have conduit and wiring for future solar installations.

c. **Mechanical Dwelling Unit System Efficiency Benefit.** The Project provides a mechanical dwelling unit system with a Seasonal Energy Efficiency Ratio ("SEER") of 15.

d. **Lighting Occupancy Sensors and Fenestration Energy Efficiency.** Notwithstanding any other provision of this Section 3.~~5~~2, the Project shall: (i) provide state of the art occupancy sensors consistent with the California Energy Code in place at the time the time of Project permitting; and (ii) purchase and install windows and exterior façade materials consistent with the California Energy Code requirements in place at the time of Project permitting.

~~**3.3**~~

**3.3 Publicly Accessible, Privately Maintained Open Space**. Developer shall make the Project open space areas identified on Exhibit C attached to this Agreement ("**Public Open Space Areas**"), which total approximately 111,581 square feet, accessible to the public during the hours of 7:00 a.m. to 7:00 p.m. Developer shall be fully responsible for all maintenance, care and upkeep of the Public Open Space Areas through the life of the Project; this obligation shall survive any termination or expiration of this Agreement.

~~3.6.~~

**3.4 ~~Publicly Accessible~~ Existing Pedestrian Bridge.** Developer and City shall ~~engage in~~ immediately commence good faith negotiations on improving the existing bridge that crosses the Dominguez Channel and connects Avalon Boulevard with Lenardo Boulevard ("Bridge"). Such negotiations will focus on improvements to the Bridge that will a) create and enhance the pedestrian access between Avalon Boulevard and Lenardo Boulevard; and b) improve the aesthetic appearance of the Bridge and the pedestrian connection between Avalon Boulevard and Lenardo Boulevard. Subject to any requisite approvals from any authority with jurisdiction over the Bridge, such improvements will include, but are not limited to, the following:

(1) removing the existing "PEDESTRIANS PROHIBITED" sign to allow for pedestrian access;

(2) restriping, or otherwise improving the aesthetic appearance of the Bridge;

(3) improving the pedestrian experience between Avalon Boulevard and Lenardo Boulevard through the installation of new landscaping and amenities such as additional wayfinding signage, etc. or other aesthetic improvements (collectively, the "**Improvements**").

Developer shall contribute an aggregate amount up to but not to exceed one hundred and twenty-five thousand dollars ($125,000), unless otherwise agreed to by Developer and City in a separate agreement, towards the Improvement no later than five (5) years from the Effective Date ~~of this Agreement. Developer shall work with the City to design, construct and maintain a pedestrian bridge at Developer's sole cost and conceptually identified on Exhibit D attached to this Agreement, subject to City Engineer approval, to allow for pedestrian and bicycle access over the Torrance Lateral Flood Control Channel (BI 1232 Line A) from the Project site to the District at South Bay Specific Plan area. Developer shall also be responsible to pay for any permits, air rights, and all other costs associated with delivering a functional and complete bridge. All applicable codes including but not limited to building and fire codes shall be adhered to. The pedestrian bridge shall be accessible to the public at all times. Construction of the pedestrian bridge is contingent upon the Parties' ability to obtain all necessary approvals, easements, rights, and permits from any Federal, State or local governmental agency with permitting or approval authority over the pedestrian bridge, including but not limited to the Los Angeles County Flood Control District and the United States Army Corps of Engineers. Developer shall make, and shall demonstrate to the Director upon request, reasonable best efforts to obtain the required approvals and permits and to construct the pedestrian bridge prior to issuance of the first building permit for the Project, or within five years of the Effective Date of this Agreement, whichever is later. If, by such time, the Parties have made substantial progress toward securing the necessary approvals and permits or with construction of the bridge, as determined by the Director, then the Director may grant extensions of time as may be necessary to allow for completion of securing the necessary approvals and permits and/or completion of construction of the bridge, provided Director determines for each extension that Developer has been diligently pursuing securing the necessary permits and approvals and completion of construction without delay and is continuing to make substantial progress. If the Parties are unable to obtain all necessary approvals and permits in order to construct the pedestrian bridge or fail to complete construction of the bridge timely in accordance with this provision, then the Developer (or its nonprofit entity described in Section 3.1, subject to the~~

~~requirements of Section 3.2), prior to issuance of the first building permit for the Project, or within five years of the Effective Date of this Agreement, whichever is later, constructed as part of the Project, shall make a cash contribution of four million dollars ($4,000,000) to City, to be used for the purpose of providing an enhanced art walk leading from the Project site to the District at South Bay Specific Plan and/or other making other pedestrian improvements in the vicinity of the Project site as determined by the City. This sum shall be additional to the Development Agreement Fee. If the Developer ever fails to pay the $4,000,000 within thirty (30) days of it becoming due, then subject to the notice and cure provisions of Section 7.2 of this Agreement, liquidated damages in the amount of one thousand dollars ($1,000.00) per day that any portion of the payment is outstanding shall be assessed, as the Parties agree that is such event the determination of actual damages for the delay in performance of this obligation would be extremely difficult or impractical to determine. The Developer shall be responsible to reimburse the City for all costs of the maintenance, care, and upkeep of the pedestrian bridge through the life of the Project; this obligation shall survive any termination or expiration of this Agreement.~~

~~3.7.~~

3.5 **Restaurant and Kitchen Timing.** Developer agrees that the restaurant space to be included in the Project's approximately 10,000 square feet (including outdoor/patio space) of ground floor commercial area must include a fully built out kitchen prior to issuance of a certificate of occupancy for the last residential building constructed within the Project.

~~3.8~~

3.6 **Art Benefit.**

a. **Apartments.** Prior to issuance of any certificates of occupancy ~~the first building permit for the Townhomes and prior to issuance of building permits~~ for each of the two Apartment buildings, the Developer shall pay a public art fee equal to one percent (1%) of the total building valuation for ~~all Townhomes and each of the two~~ the respective Apartment buildings ~~(i.e., all Project buildings)~~ as determined by the City's Building Official in accordance with the Marshall-Swift Valuation Guide per the City Building Official's standard practice ("~~Project~~ Apartment Art Fee").

In lieu of paying the ~~Project~~Apartment Art Fee, Developer may incorporate on-site art ("Apartment Art"), including but not limited to art within the exterior north side of the Project facing the 405 freeway, to the satisfaction of the Director, in which case Developer shall submit an Apartment ~~Project A~~art plan, valuation, and implementation plan to the Director prior to issuance of the first ~~Project building permit~~certificate of occupancy for the respective Apartment building.

Unless otherwise approved by the Director pursuant to the Apartment ~~art~~ Art implementation plan, Developer's on-site Apartment Art ~~art~~ which corresponds to a particular building shall be installed prior to issuance of a final certificate of occupancy for the ~~corresponding~~ respective building~~, and art that does not correspond to any particular building shall be installed within six months following issuance of the certificate of occupancy for the first Apartment building constructed as part of the Project~~. Individual art valuations shall be submitted for each ~~Project~~ building ~~prior to issuance of building permits for the respective buildings~~. Should the value of Developer's onsite Apartment Art~~art~~ be less than one percent (1%) of the total building valuation for each of the two Apartment buildings, respectively, ~~the entire Project as described~~

~~above,~~ then Developer shall pay the City the difference in its entirety prior to issuance of the final certificate of occupancy for the ~~150th Townhome constructed as part of the Project~~respective Apartment building.

b. **Townhomes.** Prior to issuance of any certificates of occupancy for the Townhomes, the Developer shall pay a public art fee equal to one percent (1%) of the total building valuation for all Townhomes as determined by the City's Building Official in accordance with the Marshall-Swift Valuation Guide per the City Building Official's standard practice ("Townhome Art Fee").

In lieu of paying the Townhome Art Fee, Developer may incorporate on-site art ("Townhome Art"), including but not limited to art within the exterior north side of the Project facing the 405 freeway, to the satisfaction of the Director, in which case Developer shall submit a Townhome Art plan, valuation, and implementation plan to the Director prior to issuance of the first certificate of occupancy for the Townhomes.

Unless otherwise approved by the Director pursuant to the Townhome Art implementation plan, Developer's on-site Townhome Art shall be installed prior to issuance of a final certificate of occupancy for the Townhomes. Should the value of Developer's onsite Townhome Art be less than one percent (1%) of the total building valuation for Townhomes, then Developer shall pay the City the difference in its entirety prior to issuance of the certificate of occupancy for the 150th Townhome constructed as part of the Project.

~~3.7~~

**Traffic Signal.** Developer shall fund and install a new traffic signal at the Project entry location on Avalon Boulevard between the I-405 interchange and 213th Street, in accordance with plans approved by the City's Director of Public Works or his or her designee, which shall include approval of the projected costs. Developer will be eligible for reimbursement of up to 50% of the approved costs of the new traffic signal by City upon completion of the comprehensive redevelopment of the Kott site (located to the east of the Property, north of E. 213th St. and east of Avalon Blvd. to the I-405 freeway). Developer shall submit plans for the traffic signal with an estimate of the cost prior to issuance of the first building permit issued for the Project and shall complete installation prior to issuance of the first Project certificate of occupancy.

~~3.9~~ In addition to the traffic signal at the Project entry location on Avalon Boulevard between the I-405 interchange and 213th Street, Developer is responsible to signalize the currently stop-controlled Grace Avenue/213" Street intersection per MMRP PDF-TRA-2 ("Grace Avenue/213th Street Signalization"). In lieu of signalizing the intersection, Developer may pay an in-lieu fee of Seven Hundred and Fifty Thousand Dollars ($750,000) to the City. The in-lieu fee shall be payable as follows: One Hundred Thousand Dollars ($100,000) shall be due prior to issuance of any Building Permit for the Project and Six Hundred and Fifty Thousand Dollars ($650,000) shall be due prior to issuance of any Certificate of Occupancy for the Project in order to satisfy the requirement. The amount prescribed shall be used by the City to upgrade the Grace Avenue/213th Street intersection.

~~**3.10 Carson and Avalon 405 Interchange Landscaping Improvement**. Prior to~~

~~issuance of the certificate of occupancy for the second Apartment building or any Townhome, Developer or Developer's Nonprofit identified in Section 3.2 shall provide up to one million dollars ($1,000,000.00) in matching funds ("Matching Funds") for landscaping upgrades and improvements for the I-405 interchange at Carson Street and Avalon Boulevard ("I-405 Interchange Upgrades"). Prior to receiving the Matching Funds, the City must provide Developer a concept plan detailing how the I-405 Interchange Upgrades will be implemented, a budget and evidence that the City is in possession dedicated funds equal or greater than the Matching Funds.~~

~~**3.11 Purple Pipe.** Developer shall install recycled water purple pipe onsite and shall coordinate the tie-in of the onsite recycled water purple pipe infrastructure for future connections to offsite purple pipe infrastructure extensions as such connections become available. Notwithstanding any other provision of this Agreement, this Section 3.12 shall supersede and prevail over the Condition of Approval of VTTM No. 83157 pertaining to purple pipe to the extent of a conflict.~~

## ~~4.~~4 DEVELOPMENT OF THE PROPERTY.

**4.1 Scope of Developer's Vested Right.** Subject to the Reservation of Authority set forth in Article 5, Developer shall have the vested right to develop the Project in accordance with and to the full extent permitted under the Applicable Laws and this Agreement ("**Developer's Vested Right**").

**4.2 Effect of Agreement on Land Use Regulations**. Except as otherwise provided under the terms of this Agreement, the rules, regulations and official policies governing permitted uses of the Property, the density and intensity of use of the Property, the maximum height and size of proposed buildings, and the design, improvement and construction standards and specifications applicable to the Development of the Property, shall be as set forth in the Existing Land Use Regulations which were in full force and effect as of the Effective Date ~~of this Agreement~~, subject to the terms of this Agreement.

**4.3 Rights under State and Federal Law.** Developer shall retain all rights it has under state and federal law, including, but not limited to, Developer's rights under Government Code Section 65865.2, which provides that subsequent discretionary actions shall not prevent development of the Property for the uses and to the density or intensity of development set forth in the Project Development Approvals.

**4.4 Apportionment.** Developer shall have the right to apportion the uses, intensities, and densities of the Project between itself and any subsequent owners, upon the sale, transfer, or assignment of all or any portion of the Property, so long as such apportionment is consistent with the Applicable Laws and this Agreement.

**~~4.1~~4.5 Lesser Development.** Except as otherwise provided in this Agreement: without amending this Agreement, Developer shall have the right to elect to develop and construct upon all or any portion of the Property a Project of lesser height or building size than that permitted by the Project Development Approvals provided that the Project otherwise complies with the Project Development Approvals and this Agreement.

~~4.2~~4.6 **Project Development Approvals; Subsequent Development Approvals.** The Project Development Approvals for the Project may require the processing of Subsequent Development Approvals. Subject to the provisions of Section 4.7 below, the City shall accept for processing, review and action all applications for Subsequent Development Approvals, and such applications shall be processed in the normal manner for processing such matters in accordance with the Existing Land Use Regulations. The parties acknowledge that subject to the Existing Land Use Regulations, under no circumstances shall City be obligated in any manner to approve any Subsequent Development Approval, or to approve any Subsequent Development Approval with or without any particular condition. However, unless otherwise requested by Developer, City shall not, without good cause, amend or rescind any Subsequent Development Approvals respecting the Property after such approvals have been granted by the City. Processing of Subsequent Development Approvals or changes in the Project Development Approvals made pursuant to Developer's application shall not require an amendment to this Agreement. This Agreement shall not prevent City from denying or conditionally approving any application for a Subsequent Development Approval on the basis of the Existing Land Use Regulations.

~~4.3~~4.7 **Role of Project Development Approvals**. Except as provided within this Agreement, the Project Development Approvals shall exclusively control the uses of the Property, the density or intensity of use, the maximum height and size of proposed buildings, the provisions for reservation or dedication of land for public purposes and the design, improvement, and construction standards and specifications applicable to the Project. Pursuant to Government Code Section 66452.6, the term of any tentative map for the Property or any portion thereof, if any, filed within the term of this Agreement shall automatically be extended for the term of this Agreement, as amended by the Project Development Approvals. In addition, Developer shall have the right to commence Project construction of both Apartment buildings and the Townhomes within the Project prior to the recordation of an approved final subdivision map No. 83157 if applicable permits have been issued and all other applicable conditions of approval and Development Agreement provisions are met. However, the approved final subdivision map must be recorded prior to issuance of an certificates of occupancy (temporary or otherwise) for the Project, and prior to any occupancy of the Project. Following recordation of the final subdivision map, temporary certificates of occupancy shall be issued if buildings or units are deemed to have satisfied all applicable fire-life safety components and systems to safely occupy the completed areas as determined by the Building Official. ~~occurrence of either of the following: (i) issuance of any building permits for the Townhomes; (ii) issuance of a certificate of occupancy for either of the Apartment buildings. Neither the Apartment lots nor the Apartment buildings may be individually sold prior recordation of the approved final subdivision map No. 83157.~~ To support development of the Project, which may be completed in phases, the City hereby agrees that final certificates of occupancy shall also be issued for each individual Project phase. The anticipated phases consist of: (i) the Townhome component, (ii) the first Apartment building and (iii) the second Apartment building, respectively. Any tentative map prepared for the Project subdivision will comply with Government Code Section 66473.7.

~~4.4~~4.8 **Moratorium**. Notwithstanding any other provision of this Agreement, no future amendment of any existing City ordinance or resolution or any subsequent ordinance, resolution or moratorium, enacted either by the City Council or by voter approved initiative, that purports to impose or result in a limitation on the Project, imposed by City, shall apply to govern, or regulate the Project or development or use of the Property during the Term. In the event of any such

subsequent action by City, Developer shall continue to be entitled to apply for and receive Development Approvals in accordance with the Existing Land Use Regulations, subject only to the exercise of the City's Reservation of Authority set forth herein.

~~4.5~~4.9 **Maintaining Property**. The Property must at all times be maintained and generally kept in a clean condition, in accordance with the CMC and the City's code enforcement regulations.

## 5. CITY'S RESERVATION OF AUTHORITY.

Notwithstanding Developer's Vested Right, the Project is subject to the following Subsequent Land Use Regulations:

**5.1 City's Discretion Under Applicable Laws.** In considering future applications, if any, for a Subsequent Development Approval, the City may exercise its regulatory discretion to the extent permitted by the Applicable Laws.

**5.2 Uniform Codes.** Changes adopted by the International Conference of Building Officials, or other similar body, as part of the then most current versions of the Uniform Building Code, Uniform Fire Code, Uniform Plumbing Code, Uniform Mechanical Code, or National Electrical Code, or other such Uniform Codes, and also adopted by City as Subsequent Land Use Regulations, but only if: (i) the Project is not subjected to the 2019 codes pursuant to Section 3.~~5~~2 of this Agreement; and (ii) such changes are applicable City-wide.

**5.3 Emergencies.** Emergency rules, regulations, laws, and ordinances within the City's police power that would limit the exercise of Developer's Vested Right ("**Conflicting Emergency Regulations**"), provided that the Conflicting Emergency Regulations:

a. Result from a sudden, unexpected emergency declared by the President of the United States, Governor of California, County Board of Supervisors and applicable to incorporated areas, including the City, or the City Council;

b. Address a clear and imminent danger, with no effective reasonable alternative available that would have a lesser adverse effect on Developer's Vested Right;

c. Do not primarily or disproportionately impact the development of the Project; and

d. Are based upon findings of necessity established by a preponderance of the evidence at a public hearing.

**5.4 Laws of Other Jurisdictions.** Other public agencies not subject to control by City may possess authority to regulate aspects of the Project. This Agreement does not limit the authority of such other public agencies. Therefore:

a. Federal, state, county, and multi-jurisdictional laws and regulations (the "**Additional Regulations**"), including regional impact fees, which City is required to enforce against the Property or the Project, except if the

Additional Regulations are for the purpose of mitigating a significant or potentially significant impact that has already been mitigated pursuant to the Project's EIR.

b. If an Additional Regulation is enacted after the Effective Date and prevents or precludes compliance with one or more of the provisions of this Agreement, those provisions shall be modified or suspended as may be necessary to comply with the Additional Regulation. In that event, this Agreement shall remain in full force and effect to the extent it is not inconsistent with the Additional Regulation and to the extent that the suspension or modification necessitated by the Additional Regulation does not deny one of the Parties its primary benefits under this Agreement.

c. Developer shall apply in a timely manner for such other permits and approvals that are lawfully required by other governmental or quasi-governmental agencies in order to allow the Project to be constructed. City shall provide Developer reasonable cooperation in Developer's efforts to obtain such permits and approvals. The Parties shall cooperate and use reasonable efforts in coordinating the implementation of the Development with other public agencies, if any, having jurisdiction over the Property or the Project.

**5.5 Modification or Suspension by Federal or State Laws.** In the event that Federal or State laws or regulations, enacted after the Effective Date ~~of this Agreement~~, prevent or preclude compliance with one or more of the provisions of this Agreement, such provisions of this Agreement shall be modified or suspended as may be necessary to comply with such Federal or State laws or regulations, and this Agreement shall remain in full force and effect to the extent it is not inconsistent with such laws or regulations and to the extent such laws or regulations do not render such remaining provision impractical to enforce.

**5.6 Employment Outreach for Local Residents**. A goal of the City with respect to this Project and other major projects within the City is to foster employment opportunities for Carson residents. To that end, Developer covenants that with respect to the construction, operation and maintenance of the Project, the Developer shall make reasonable efforts to cause all solicitations for full or part-time, new or replacement, employment relating to the construction, operation and maintenance of the Project to be advertised in such a manner as to target local City residents and shall make other reasonable efforts at local employment outreach as the City shall approve. Developer shall also notify the City of jobs available at the Project such that the City may inform City residents of job availability at the Project. Developer will inform its purchasers and lessees of the provisions of these requirements. Nothing in this paragraph shall require Developer to offer employment to individuals who are not otherwise qualified for such employment. Without limiting the generality of the foregoing, the provisions of this Section 5.6 are not intended, and shall not be construed, to benefit or be enforceable by any person whatsoever other than City.

**5.7 Prevailing Wages.** Developer's cost of developing the Project and constructing all of the on-site and off-site improvements, if any, at or about the Property required to be constructed

for the Project shall be borne by Developer. Developer is aware of the laws of the State governing the payment of prevailing wages on public projects and will comply with same and will defend, hold harmless, and indemnify City in the event Developer fails to do so. As the City is not providing any direct or indirect financial assistance to Developer, the Project should not be considered to be a "public work" "paid for in whole or in part out of public funds," as described in California Labor Code Section 1720. Accordingly, it is believed by the parties that Developer is not required to pay prevailing wages in connection with any aspect of the Development or the construction of the Project. However, to the extent that (contrary to the parties' intent) it is determined that Developer was required to pay prevailing wage and has not paid prevailing wages for any portion of the Project, Developer shall defend, indemnify, and hold the City (which, for purposes of this section, shall include its related agencies, officers, employees, agents and assigns) harmless from and against any and all increase in construction costs, or other liability, loss, damage, costs, or expenses (including reasonable attorneys' fees and court costs) arising from or as a result of any action or determination that Developer failed to pay prevailing wages in connection with the construction of the Project. City shall reasonably cooperate with Developer regarding any action by Developer hereunder challenging any determination that the Project is subject to the payment of prevailing wages. Notwithstanding the foregoing, the City retains the right to settle or abandon the matter without Developer's consent as to the City's liabilities or rights only, but should it do so, City shall waive the indemnification herein provided such waiver occurs prior to the issuance of any judgment in the matter.

**5.8 Fees, Taxes, and Assessments.**

a. **Processing Fees**. The Developer shall pay all processing fees and charges of every kind and nature imposed by City to cover the estimated actual costs to City of processing applications for Project Development Approvals, including but not limited to, City Attorney fees incurred by City for the review, preparation and negotiation of the Entitlements, inclusive of this Agreement, at a rate of $495 per hour for partners and $395 per hour for associates, and for monitoring compliance with any Project Development Approvals granted or issued, in accordance with the Reimbursement and Indemnification Agreement entered into by and between the Parties effective December 16, 2019, and as amended and restated pursuant to the First Amended Reimbursement and Indemnification Agreement entered into by and between the Parties effective June 1, 2022, and as the same may be amended from time to time by mutual agreement of the Parties.

b. **Permit Fees**. Except as expressly provided in this Agreement, Developer shall pay all standard permit fees and other fees and charges which are standard and uniformly-applied to similar projects in the City.

c. **Master Community Facilities District.** On November 7, 2018, the City formed a Master CFD entitled City of Carson Community Facilities District No. 2018-01 (Maintenance and Services) (the "**Master CFD**") for the purpose of funding the maintenance of public infrastructure within the area of the Master CFD which is within the City's jurisdictional boundaries (the "**Services**") including areas that voluntarily annex into the Master CFD. ~~In~~

~~light of the substantial Developer contributions towards infrastructure, parks and other public benefits as set forth in Article 3 of this Agreement secured through payment of the Development Agreement Fee, it is understood~~ The Parties agree that the City will not require annexation of the Property or the Project into the Master CFD for the life of the Project. This provision shall survive the Term of the Agreement.

d. **Development Impact Fee.** ~~In light of the substantial Developer contributions towards infrastructure, parks and other public benefits as set forth in Article 3 of this Agreement secured through payment of the Development Agreement Fee, it is understood that the City will not assess~~ Developer shall be required to pay any Development Impact Fees that would normally be required in the execution of the Project pursuant to City Ordinance No. 19-1931. In accordance with Carson Municipal Code Section 11504, the City has determined that Developer shall not be required to pay Development Impact Fees for any Townhome or Apartment building until the issuance of a certificate of occupancy for the specific Townhome or Apartment building or up to twelve (12) months following the issuance of the building permit for the specific Townhome or Apartment building, whichever occurs first. The deferred Development Impact Fee payments will be based on the fees in effect at the time of actual payment, including any applicable fee offsets to which Developer might be entitled under the Carson Municipal Code. This provision is intended to be, and shall be implemented so as to be, consistent with the requirements of Government Code Section 66007, and is not intended to confer a unique or special benefit on the Project that it would not otherwise be entitled to under state law and the Carson Municipal Code. ~~Accordingly, the Parties understand, acknowledge and agree that no credits or reimbursements will be available to Developer pursuant to Ordinance No. 19-1931 or any provision of the CMC (as may be amended) to offset, reduce or refund any portion of the Development Agreement Fee.~~

e. **General Charges**. Nothing herein shall prohibit the application of the following, if lawfully imposed upon the Property, excluding any existing or future CFD:

(i) Additional Taxes, Fee, and Charges. Developer, or Developer's Project occupants, shall pay all normal and customary taxes, fees, and charges applicable to all permits necessary for the Project, and any taxes, fees, and charges hereafter imposed by City, which are standard and uniformly-applied to similar properties in the City.

(ii) Developer , or Developer's Project occupants, shall be obligated to pay any fees or taxes, and increases thereof, imposed on a City-wide basis such as business license fees or taxes, sales or use taxes, transient occupancy taxes, utility taxes, and public safety taxes;

(iii) Developer, or Developer's Project occupants, shall be obligated to pay any fees imposed pursuant to any Uniform Code.

(iv) Developer, or Developer's Project occupants, shall be obligated to pay any utility fees and charges, including amended rates thereof, for City services such as electrical utility charges, water rates, and sewer rates.

**5.9 Inconsistencies.** It is expressly agreed that in the event of any inconsistency between the provisions or conditions of the Existing Land Use Regulations or Conditions of Approval and the provisions of this Agreement, the provisions of this Agreement shall govern. The conditions of such Existing Land Use Regulations and Conditions of Approval shall be interpreted insofar as possible to prevent such inconsistency, and in the event this Agreement is silent concerning an issue, the conditions of the Existing Land Use Regulations and Conditions of Approval shall govern. As between several instruments and regulations governing the Project, in the event of a clear and explicit conflict which cannot be resolved through interpretation, the following interpretive priorities shall apply: (i) the terms of this Agreement shall prevail over the provisions of the Existing Land Use Regulations and Project Development Approvals except where the Conditions of Approval are more restrictive, in which event the Conditions of Approval shall prevail; (ii) the terms of the Project Development Approvals shall prevail over the terms of the Existing Land Use Regulations, except where such Existing Land Use Regulations are legally preemptive; and (iii) the terms of the Project Development Approvals shall take priority over the provisions of the CEQA instruments and EIR approved in conjunction with the Project, except where the EIR is legally preemptive.

## 6. ANNUAL REVIEW.

**6.1 Timing of Annual Review.** Pursuant to Government Code Section 65865.1, at least once during every twelve (12) month period of the Term, City shall review the good faith compliance of Developer with the terms of this Agreement ("**Annual Review**"). No failure on the part of City to conduct or complete an Annual Review as provided herein shall have any impact on the validity of this Agreement, nor shall it be deemed a breach on the part of Developer. The cost of the Annual Review shall be borne by Developer and Developer shall pay the actual and reasonable costs incurred by the City for such review.

**6.2 Special Review.** The City Council may, in its sole and absolute discretion, order a special review of compliance with this Agreement at any time at City's sole cost ("**Special Review**"). Developer shall cooperate with the City in the conduct of such Special Reviews.

**6.3 Standards for Annual Review.** During the Annual Review, Developer shall demonstrate good faith compliance with the terms of this Agreement. "**Good faith compliance**" shall be established if Developer is in substantial compliance with the material terms and conditions of this Agreement.

**6.4 Procedure.** Each party shall have a reasonable opportunity to assert matters which it believes have not been undertaken in accordance with the Agreement, to explain the basis for such assertion, and to receive from the other party a justification of its position on such matters.

The procedure for an Annual Review or Special Review shall be as follows:

a. As part of either an Annual Review or Special Review, within ten (10) days of a request for information by the City, the Developer shall deliver to the City all information and supporting documents reasonably requested by City (i) regarding the Developer's performance under this Agreement demonstrating that the Developer has complied in good faith with the terms of this Agreement, and (ii) as required by the Existing Land Use Regulations.

b. The City Manager, or his/her designee, shall prepare and submit to Developer a written report on the performance of this Agreement and identify any perceived deficiencies in Developer's performance of this Agreement. The Developer may submit written responses to the report and Developer's written response shall be included in the City Manager's report. If the City Manager determines that the Developer has substantially complied with the terms and conditions of this Agreement, the Annual or Special Review shall be concluded.

c. If any deficiencies are noted, or if requested by a Councilmember, a public hearing shall be held before the City Council at which the Council will review the City Manager's report. The report to Council shall be made at a regularly-scheduled City Council meeting occurring as soon as possible, subject to the requirements of the Brown Act, after the commencement of the Annual or Special Review process outlined in this Section 6.4. If the City Council finds and determines, based on substantial evidence, that the Developer has not substantially complied with the terms and conditions of this Agreement for the period under review, the City may declare a default by the Developer in accordance with Article 7.

d. Neither party hereto shall be deemed in breach if the reason for non-compliance is due to a "force majeure" as defined in, and subject to the provisions of, Section 13.11.

**6.5 Certificate of Agreement Compliance.** If, at the conclusion of an Annual Review or a Special Review, Developer is found to be in compliance with this Agreement, City shall, upon written request by Developer, issue a Certificate of Agreement Compliance ("**Certificate**") to Developer stating that after the most recent Annual Review or Special Review and based upon the information known or made known to the City Manager, Planning Commission, and City Council that (i) this Agreement remains in effect and (ii) Developer is in compliance. The Certificate, whether issued after an Annual Review or Special Review, shall be in recordable form, shall contain information necessary to communicate constructive record notice of the finding of compliance. Developer shall at its cost record the Certificate with the County Recorder. Additionally, Developer may at any time request from the City a Certificate stating, in addition to the foregoing, which obligations under this Agreement have been fully satisfied with respect to the Property, or any lot or parcel within the Property.

**6.6 Review Process Not a Prerequisite to Declaring a Default**. Neither the Annual Review nor Special Review procedure is a prerequisite to either party declaring a default and initiating the default and cure procedure in Article 7. In other words, either party may declare a default at any time without first undertaking the Annual Review or Special Review process.

**6.7 Public Hearings.** The public hearing prescribed by Section 6.4 is independent of, and in addition to, any further hearing procedures relating to defaults and remedies prescribed in Article 7 below. Thus, if the City Council finds that the Developer has not substantially complied with the terms and conditions of this Agreement as part of a review process pursuant to Section 6.4 and determines to declare a default, the City Council is still required to follow the notice/cure process (Section 7.2) and the termination hearing process (Section 7.4) before terminating this Agreement.

## 7. DEFAULTS AND REMEDIES.

**7.1 Remedies Available.** The parties acknowledge and agree that other than the termination of this Agreement pursuant to Article 7, specific performance, injunctive and declaratory relief are the only remedies available for the enforcement of this Agreement and knowingly, intelligently, and willingly waive any and all other remedies otherwise available in law or equity. Accordingly, and not by way of limitation, and except as otherwise provided in this Agreement, Developer shall not be entitled to any money damages from City by reason of any default under this Agreement. Further, Developer shall not bring an action against City nor obtain any judgment for damages for a regulatory taking, inverse condemnation, unreasonable exactions, reduction in value of property, delay in undertaking any action, or asserting any other liability for any matter or for any cause which existed or which the Developer knew of or should have known of prior to the time of entering into this Agreement, Developer's sole remedies being as specifically provided above. Developer acknowledges that such remedies are adequate to protect Developer's interest hereunder and the waiver made herein is made in consideration of the obligations assumed by the City hereunder.

**7.2 Declaration of Default & Opportunity to Cure.**

a. Rights of Non-Defaulting Party after Default. The parties acknowledge that both parties shall have hereunder all legal and equitable remedies as provided by law following the occurrence of a default or to enforce any covenant or agreement herein except as provided in Section 7.1. Before this Agreement may be terminated or action may be taken to obtain judicial relief the party seeking relief ("**Non-Defaulting Party**") shall comply with the notice and cure provisions of this Section 7.2.

b. Notice and Opportunity to Cure. A Non-Defaulting Party in its discretion may elect to declare a default under this Agreement in accordance with the procedures hereinafter set forth for any failure or breach of the other party ("**Defaulting Party**") to perform any material duty or obligation of the Defaulting Party under the terms of this Agreement. However, the Non-Defaulting Party must provide written notice to the Defaulting Party setting forth the nature of the breach or failure and the actions, if any, required by

the Defaulting Party to cure such breach or failure (the "**Default Notice**"). The Defaulting Party shall be deemed in Default under this Agreement, if the breach or failure can be cured, but the Defaulting Party has failed to take such actions and cure such default within thirty (30) days after the date of such notice or ten (10) days for monetary defaults (or such lesser time as may be specifically provided in this Agreement). However, if such non-monetary Default cannot be cured within such thirty (30) day period, and if and, as long as the Defaulting Party does each of the following:

(i) Notifies the Non-Defaulting Party in writing with a reasonable explanation as to the reasons the asserted default is not curable within the thirty (30) day period;

(ii) Notifies the Non-Defaulting Party of the Defaulting Party's proposed cause of action to cure the default;

(iii) Promptly commences to cure the default within the thirty (30) day period;

(iv) Makes periodic reports to the Non-Defaulting Party as to the progress of the program of cure; and

(v) Diligently prosecutes such cure to completion.

Then the Defaulting Party shall not be deemed in breach of this Agreement.

**7.3 Termination Notice.** Upon receiving a Default Notice, should the Defaulting Party fail to timely cure any default, or fail to diligently pursue such cure as prescribed above, the Non-Defaulting Party may seek termination of this Agreement, in which case the Non-Defaulting Party shall provide the Defaulting Party with a written notice of intent to terminate this Agreement ("**Termination Notice**"). The Termination Notice shall state that the Non-Defaulting Party will elect to terminate this Agreement within thirty (30) days and state the reasons therefor (including a copy of any specific charges of default or a copy of the Default Notice) and a description of the evidence upon which the decision to terminate is based. Once the Termination Notice has been issued, the Non-Defaulting Party's election to terminate this Agreement will only be rescinded if so determined by the City Council pursuant to Section 7.4.

**7.4 Hearing Opportunity Prior to Termination**. If Developer is the Defaulting Party pursuant to Section 7.3, then the City's Termination Notice to Developer shall additionally specify that Developer has the right to a hearing prior to the City's termination of any Agreements ("**Termination Hearing**"). The Termination Hearing shall be scheduled as an open public hearing item at a regularly-scheduled City Council meeting within thirty (30) days of the Termination Notice, subject to any legal requirements including but not limited to the Ralph M. Brown Act, Government Code Sections 54950-54963. At said Termination Hearing, Developer shall have the right to present evidence to demonstrate that it is not in default and to rebut any evidence presented in favor of termination. Based upon substantial evidence presented at the Termination Hearing, the Council may, by adopted resolution, act as follows:

a. Decide to terminate this Agreement; or

b. Determine that Developer is innocent of a default and, accordingly, dismiss the Termination Notice and any charges of default; or

c. Impose conditions on a finding of default and a time for cure, such that Developer's fulfillment of said conditions will waive or cure any default.

Findings of a default or a conditional default must be based upon substantial evidence supporting the following two findings: (i) that a default in fact occurred and has continued to exist without timely cure, and (ii) that such default has caused or will cause a material breach of this Agreement and/or a substantial negative impact upon public health, safety and welfare, the environment, or such other interests that the City and public may have in the Project.

**7.5 Rights and Duties Following Termination.** Upon the termination of this Agreement, no party shall have any further right or obligation hereunder except with respect to (i) any obligations to have been performed prior to said termination, (ii) any default in the performance of the provisions of this Agreement which has occurred prior to said termination, or (iii) the indemnification provisions of Article 8. Termination of this Agreement pursuant to this Section 7 shall automatically terminate the Project Development Approvals.

**7.6 Waiver of Breach**. By not challenging any Development Approval within ninety (90) days of the action of City enacting the same, Developer shall be deemed to have waived any claim that any condition of approval is improper or that the action, as approved, constitutes a breach of the provisions of this Agreement.

**7.7 Interest on Monetary Default.** In the event Developer fails to perform any monetary obligation under this Agreement, Developer shall pay interest thereon at the rate of six and one-half percent (6.5%) per annum from and after the due date of said monetary obligation until payment is actually received by City.

## 8. THIRD PARTY LITIGATION.

### 8.1 Indemnity Obligations on Third-Party Claims

a. Developer hereby agrees to indemnify, defend, and hold City, its officers, agents, employees, members of its City Council and any commission, partners and representatives ("**City Indemnitees**") harmless from any and all claims, actions, suits, damages, liabilities, and any other actions or proceedings (whether legal, equitable, declaratory, administrative, or adjudicatory in nature) (collectively, "**Claims**"), asserted against City or City Indemnitees arising out of or in connection with this Agreement, including, without limitation, (i) City's approval of this Agreement and all documents related to any of the Project Development Approvals, Conditions of Approval, permits, or other entitlements for the Project and issues related thereto (including, without limitation, City's determinations regarding CEQA compliance and/or any other development incentives

granted to the Project), (ii) the development of the Project, (iii) liability for damage or claims for damage for personal injury including death and claims for property damage which may arise from, or are attributable to, Developer's (or Developer's contractors, subcontractors, agents, employees or other persons acting on Developer's behalf ("**Developer's Representatives**")) performance of its obligations under this Agreement and/or the negligence or misconduct of Developer or of Developer's Representatives which relate to the Project or the Property, and (iv) Developer's failure to comply with any applicable federal, state or local law, rule, or regulation, including, but not limited to, those relating to industrial hygiene or to environmental conditions on, under or about the Property, such as (without limitation) soil and groundwater conditions.

b. The City shall provide the Developer with notice of the pendency of such Claims within ten (10) days of being served or otherwise notified of such Claims and shall request that the Developer defend such action. The Developer may utilize the City Attorney's office or use legal counsel of its choosing, but shall reimburse the City for any necessary legal cost incurred by City. In all cases, City shall have the right to utilize the City Attorney's office in any legal action. The Developer shall provide a deposit in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of litigation, including the cost of any award of attorney's fees. If the Developer fails to provide the deposit, and after compliance with the provisions of this Section 8.1, the City may abandon the action and the Developer shall pay all costs resulting therefrom and City shall have no liability to the Developer. The Developer's obligation to pay the cost of the action, including judgment, shall extend until judgment. After judgment in a trial court, the parties must mutually agree as to whether any appeal will be taken or defended. City agrees that it shall fully cooperate with the Developer in the defense of any matter in which the Developer is defending and/or holding the City harmless.

**8.2 Hold Harmless: Developer's Construction, and Other Activities.** The Developer shall defend, save and hold the City and its elected and appointed boards, commissions, officers, agents, and employees harmless from any and all claims, costs (including attorneys' fees) and liability for any damages, personal injury or death, which may arise, directly or indirectly, from the Developer's or the Developer's agents, contractors, subcontractors, agents, or employees' Project construction activities and operations under this Agreement, whether such Project construction activities and operations be by the Developer or by any of the Developer's agents, contractors or subcontractors or by any one or more persons directly or indirectly employed by or acting as agent for the Developer or any of the Developer's agents, contractors or subcontractors. Nothing herein shall be construed to mean that the Developer shall hold the City harmless and/or defend it from any claims arising from, or alleged to arise from, the sole negligence or gross or willful misconduct of the City's officers, employees, agents, contractors of subcontractors.

**8.3 Loss and Damage.** City shall not be liable for any damage to property of Developer or of others located on the Property, nor for the loss of or damage to any property of Developer or

of others by theft or otherwise. City shall not be liable for any injury or damage to persons or property resulting from fire, explosion, steam, gas, electricity, water, rain, dampness or leaks from any part of the Property or from the pipes or plumbing, or from the street, or from any environmental or soil contamination or hazard, or from any other latent or patent defect in the soil, subsurface or physical condition of the Property, or by any other cause of whatsoever nature. Nothing herein shall be construed to mean that the Developer shall bear liability for the sole negligence or gross or willful misconduct of the City's officers, employees, agents, contractors or subcontractors.

**8.4 Non-liability of City Officers and Employees.** No official, agent, contractor, or employee of the City shall be personally liable to the Developer, or any successor in interest, in the event of any default or breach by the City or for any amount which may become due to the Developer or to its successor, or for breach of any obligation of the terms of this Agreement.

**8.5 Conflict of Interest.** No officer or employee of the City shall have any financial interest, direct or indirect, in this Agreement nor shall any such officer or employee participate in any decision relating to this Agreement which affects the financial interest of any corporation, partnership or association in which he or she is, directly or indirectly, interested, in violation of any state statute or regulation.

**8.6 Survival of Indemnity Obligations.** All indemnity provisions set forth in this Agreement shall survive expiration or sooner termination of this Agreement for any reason other than a default by City.

## 9. INSURANCE.

### 9.1 Types of Insurance.

a. **Public Liability Insurance**. Prior to commencement and until completion of construction of improvements by Developer on the Property, Developer shall, at its sole cost and expense, keep or cause to be kept in force, for the mutual benefit of City and Developer, comprehensive broad form general public liability insurance against claims and liability for personal injury or death arising from the use, occupancy, disuse or condition of the Property, improvements or adjoining areas or ways, affected by such use of the Property or for property damage. Such policy shall provide protection of at least $5,000,000 for bodily injury or death to any one person, at least $5,000,000 for any one accident or occurrence, and at least $5,000,000 for property damage, and $10,000,000 in the aggregate.

b. **Worker's Compensation**. To the extent Developer and its contractors utilize employees for any portion of the Project, Developer and such contractors shall also furnish or cause to be furnished to City evidence reasonably satisfactory to it that Developer and any contractor with whom Developer has contracted for the performance of any work for which Developer is responsible hereunder carries workers' compensation insurance as required by law.

c. **Automobile Liability Insurance**. Developer shall ensure that all contractors with whom Developer has contracted for the performance of any work for which Developer is responsible hereunder maintains automobile insurance at least as broad as Insurance Services Office form CA 00 01 covering bodily injury and property damage for all activities of the Developer arising out of or in connection with work to be performed under this Agreement, including coverage for any owned, hired, non-owned or rented vehicles, in an amount not less than $5,000,000 combined single limit for each accident.

d. **Pollution Liability Insurance**. Environmental Impairment Liability Insurance shall be written on a Contractor's Pollution Liability form or other form acceptable to City providing coverage for liability arising out of sudden, accidental and gradual pollution and remediation. The policy limit shall be no less than $5,000,000 dollars per claim and $10,000,000 in the aggregate. All activities contemplated in this Agreement shall be specifically scheduled on the policy as "covered operations." The policy shall provide coverage for the hauling of waste from the Project site to the final disposal location, including non-owned disposal sites.

e. **Builder's Risk Insurance.** Builder's Risk (Course of Construction) insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions or provisional limit provisions. The policy must include: (1) coverage for any ensuing loss from faulty workmanship, nonconforming work, omission or deficiency in design or specifications; (2) coverage against machinery accidents and operational testing; (3) coverage for removal of debris, and insuring the buildings, structures, machinery, equipment, materials, facilities, fixtures and all other properties constituting a part of the project; (4) ordinance or law coverage for contingent rebuilding, demolition, and increased costs of construction; (5) transit coverage (unless insured by the supplier or receiving contractor), with sub-limits sufficient to insure the full replacement value of any key equipment item; (6) ocean marine cargo coverage insuring any project materials or supplies, if applicable; (7) coverage with sub-limits sufficient to insure the full replacement value of any property or equipment stored either on or off the project site or any staging area**.** The City and Developer shall each be included as Loss Payee for their respective insurable interest.

f. **Professional Liability Insurance.** Professional liability insurance appropriate to the profession for any design work. This coverage may be written on a "claims made" basis, and must include coverage for contractual liability. The professional liability insurance required by this Agreement must be endorsed to be applicable to claims based upon, arising out of or related to services performed under this Agreement. The insurance must be maintained for at least 5 consecutive years following the completion of the services or the termination of this Agreement. During this additional 5-year

period, Developer shall annually and upon request of the City submit written evidence of this continuous coverage.

g. **Other Insurance**. Developer may procure and maintain any insurance not required by this Agreement, but all such insurance shall be subject to all of the provisions hereof pertaining to insurance and shall be for the benefit of City and Developer. Developer shall ensure that all contractors and sub-contractors maintain the required minimum insurance coverages, or shall include the contractors and subcontractors under its insurance.

h. **Renegotiation of Policy Limits.** In the event the Developer in good faith determines and submits substantial evidence to the City that any of the foregoing policy limits or required coverage provisions are unreasonable and not consistent with the prevailing insurance market at the relevant time, the City will reconsider such policy limit(s) or required coverage provision(s) in good faith, and may, but is not required to, approve a modification to same, which approval may be given by the City Manager or designee.

~~h.~~i. **Partial Transfer of Property.** In the event Developer transfers ownership of any portion of the Property ("Transferred Property"), Developer and the owner of the Transferred Property shall each be responsible for compliance with this Section 9, but shall only be required to insure their respective parcels, rather than the entire Property. To the extent Developer or owner of the Transferred Property perform work on portions of the Property not owned by them, then such party shall be responsible to comply with Section 9 for the full extent of the work area until the work is completed.

**9.2 Insurance Policy Form, Sufficiency, Content, and Insurer.** All insurance required by express provisions hereof shall be carried only by responsible insurance companies licensed and admitted to do business by California, rated "A" or better in the most recent edition of Best Rating Guide, The Key Rating Guide or in the Federal Register, and only if they are of a financial category Class VIII or better, unless waived by City. All such policies shall be non-assessable and shall contain language, to the extent obtainable, to the effect that (i) any loss shall be payable notwithstanding any act of negligence of City or Developer that might otherwise result in the forfeiture of the insurance, (ii) the insurer waives the right of subrogation against City and against City's agents and representatives; (iii) the policies are primary and noncontributing with any insurance that may be carried by City; and (iv) the policies cannot be canceled or materially changed except after thirty (30) days' written notice by the insurer to City or City's designated representative. Developer shall furnish City with copies of all such policies promptly on receipt of them or with certificates evidencing the insurance. City shall be named as an additional insured on all policies of insurance required to be procured by the terms of this Agreement, except for all insurance required by Developer's contractors, both City and Developer shall be named as an additional insured. Moreover, the insurance policy must specify that where the primary insured does not satisfy the self-insured retention, any additional insured may satisfy the self-insured retention. In the event the City's Risk Manager determines that the use, activities or condition of the Property, improvements or adjoining areas or ways, affected by such use of the Property under

this Agreement creates an increased or decreased risk of loss to the City, Developer agrees that the minimum limits of the insurance policies required by Section 9.1 may be changed accordingly upon receipt of written notice from the City's Risk Manager; provided that Developer shall have the right to appeal a determination of increased coverage to the City Council of City within ten (10) days of receipt of notice from the City's Risk Manager.

**9.3 Failure to Maintain Insurance and Proof of Compliance.** Developer shall deliver to City, in the manner required for notices, copies of certificates of all insurance policies together with endorsements required hereunder together with evidence satisfactory to City of payment required for procurement and maintenance of each policy within the following time limits:

a. For insurance required above except for professional liability insurance, ~~within thirty (30 days) after the Effective Date~~ prior to issuance of the first permit requiring or authorizing any construction or ground disturbance for the Project. For the avoidance of doubt, removal and disassembly of the Park clubhouse structure and/or Park coaches, without demolition of foundation or slab, is not included in the preceding sentence. For professional liability insurance, by August 1, 2023.

b. For any renewal or replacement of a policy already in existence, at least ten (10) days before the expiration or termination of the existing policy.

c. If Developer fails or refuses to procure or maintain insurance as required hereby or fails or refuses to furnish City with required proof that that insurance has been procured and is in force and paid for, such failure or refusal shall be a default hereunder.

**9.4 Waiver of Subrogation.** Developer agrees that it shall not make any claim against, or seek to recover from City or its agents, servants, or employees, for any loss or damage to Developer or to any person or property, except as specifically provided hereunder and Developer shall give notice to any insurance carrier of the foregoing waiver of subrogation, and obtain from such carrier, a waiver of right to recovery against City, its agents and employees.

**9.5 Broader Coverages and Higher Limits.** Notwithstanding anything else herein to the contrary, if Developer maintains broader coverages and/or higher limits than the minimums shown above, the City requires and shall be entitled to the broader coverages and/or higher limits maintained by Developer.

## 10. MORTGAGEE PROTECTION.

**10.1** Except as otherwise provided by Applicable Laws and this Agreement, the Parties agree that this Agreement shall not prevent or limit Developer, in any manner, at Developer's sole discretion, from encumbering the Property or any portion thereof or any improvement thereon by any mortgage, deed, of trust or other security device securing financing with respect to the Property. City acknowledges that the lenders providing such financing may require certain Agreement interpretations, modifications, and estoppel certificates and City agrees upon request, from time to

time, to communicate and meet with Developer and representatives of such lenders to negotiate in good faith any such estoppel certificates and/or requests for interpretation or modification. Subject to compliance with applicable laws, City will not unreasonably withhold its consent to any such requested estoppel certificate, interpretation or modification provided City determines such estoppel certificate, interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the rights and privileges set forth in this Article 10.

**10.2** Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish or impair the lien of any mortgage on the Property made in good faith and for value, unless otherwise required by law.

**10.3** The Mortgagee of any Mortgage or deed of trust encumbering the Property, or any part thereof, where Mortgagee has submitted a request in writing to the City in the manner specified herein for giving notices, shall be entitled to receive written notification from City of any default by Developer in the performance of Developer's obligations under this Agreement.

**10.4** If City timely receives a request from a Mortgagee requesting a copy of any notice of default given to Developer under the terms of this Agreement, City shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of default to Developer. The Mortgagee shall have the right, but not the obligation, to cure the default during the period that is the longer of (i) the remaining cure period allowed such party under this Agreement, or (ii) sixty (60) days.

**10.5** Any Mortgagee who comes into possession of the Property, or any part thereof, pursuant to foreclosure of the Mortgage or deed of trust, or deed in lieu of such foreclosure, shall take the Property, or part thereof, subject to the terms of this Agreement.

## 11. ASSIGNMENTS.

**11.1** The experience, knowledge, capability and reputation of Developer, its principals, employees and affiliates were a substantial inducement for the City to enter into this Agreement. The Developer may sell, transfer, lease or assign this Agreement, the Property, or any part thereof (such sale, transfer, lease or assignment shall be referred to as an "**Assignment**") with the prior written consent of the Community Development Director, which consent may not be unreasonably withheld, after providing reasonable documentation and evidence demonstrating that the person or entity to whom any of the rights or privileges granted herein are to be sold, transferred, leased, assigned, hypothecated, encumbered, merged, or consolidated, meets the following criteria: (i) the transferee has the financial strength and capability to perform its obligations under the Agreement, (ii) reasonably satisfactory evidence that the transferee has the experience and expertise to operate the Project, including reasonably satisfactory evidence that the transferee has experience with operations and projects with a similar scale of this Project; and (iii) reasonably satisfactory evidence that the transferee's key principals have no felony convictions. The proposed transferee shall execute and deliver to the City an assumption agreement assuming Developer's Project obligations, which assumption agreement shall be in a form approved by the City Manager and City Attorney.

**11.2 City Consideration of Requested Assignment.** The City agrees that it will not unreasonably withhold, condition, or delay approval of a request for approval of an Assignment required pursuant to this Article 11, provided that:

a. Developer delivers written notice to the City requesting that approval prior to the completion of the Assignment (the "**Consent Request**"); and

b. The Assignment is not completed until either (i) City has provided its written consent or (ii) sixty (60) days have passed after delivery by Developer to City of the Consent Request without the City having rejected the Consent Request in writing.

c. The Consent Request shall be accompanied by (i) a proposed draft of the Assignment and Assumption Agreement described in Section 11.3, in a form acceptable to the City Attorney and City Manager, and (ii) evidence regarding the proposed assignee's development and/or operational qualifications and experience and its financial commitments and resources in sufficient detail to enable the City to evaluate the proposed assignee's ability to complete the Project.

**11.3 Assignments Permitted Without City's Consent.** Notwithstanding any other provision of this Agreement, Assignments related to the following property conveyances and other transactions shall not require City consent:

a. The granting of easements or permits to facilitate construction of the Project or any public improvements.

b. The granting of easements or permits for utility purposes.

c. Transactions for financing purposes, including the grant of a deed of trust to secure the funds necessary, but not to exceed the amounts reasonably required, for land acquisition, construction, and/or permanent financing of any portion of the Project.

d. The acquisition of some or all of the Property by a Mortgagee in its capacity as a Mortgagee, such as through foreclosure or a deed in lieu of foreclosure.

e. A sale or transfer resulting from, or in connection with, a reorganization as contemplated by the provisions of the Internal Revenue Code of 1986, as amended or otherwise, in which the ownership interests of a corporation are assigned directly or by operation of law to a person or persons, firm or corporation which acquires the control of the voting capital stock of such corporation or all or substantially all of the assets of such corporation.

f. A sale or transfer between members of the same family, or transfers to a trust, testamentary or otherwise, in which the beneficiaries consist primarily of family members of the trustor, or transfers to a corporation or partnership in which the family members or shareholders of the transferor own at least

ten percent (10%) of the present equity ownership and/or at least fifty percent (50%) of the voting control of Developer.

g. If Developer is a trust, corporation, real estate investment trust, or partnership, a transfer of stock or other interests, provided there is no material change in the actual management and control of Developer.

h. Transactions with any member, partner, officer, employee, or affiliate of Developer or any trust or family member, provided that, following the transaction, the management of Developer on the Effective Date shall, subject to normal and customary business practices and personnel changes, remain the primary Developer representative(s) for purposes of communication with the City.

**11.4 Effect of Assignment.** Unless otherwise stated within the Assignment, upon an Assignment:

a. The assignee shall be liable for the performance of all remaining obligations of Developer with respect to those portions of the Property which are transferred (the "**Transferred Property**"), but shall have no obligations with respect to any portions of the Property not conveyed (the "**Retained Property**").

b. The owner of the Retained Property shall be liable for the performance of all obligations of Developer with respect to the Retained Property, but shall have no further obligations with respect to the Transferred Property.

c. The Assignee's exercise, use, and enjoyment of the Transferred Property shall be subject to the terms of this Agreement to the same extent as if the Assignee were the Developer.

## 12. AMENDMENT AND MODIFICATION.

**12.1 Initiation of Amendment.** Either party may propose an amendment to this Agreement.

**12.2 Procedure**. Except as set forth in Section 12.4, the procedure for proposing and adopting an amendment to this Agreement shall be the same as the procedure required for entering into this Agreement in the first instance as set forth in Government Code Section 65867.

**12.3 Consent.** Except as expressly provided in this Agreement, no cancellation of or amendment to all or any provision of this Agreement shall be effective unless set forth in writing and signed by duly authorized representatives of each of the parties hereto and recorded in the Official Records of Los Angeles County.

**12.4 Administrative Minor Project Modifications.** Notwithstanding any other provision and/or condition of approval contained in any Development Approvals, including any processes set forth in Chapter 5 of the Specific Plan, Minor Modifications to this Agreement, the

Project, and/or the Development plans shall be made ministerially, with the approval of the Director. Such "**Minor Modifications**" shall be defined as any modifications to this Agreement, the Project and/or the Development plans that do not (i) change the proposed uses analyzed for the Project in the EIR or permitted for the Project in the Project Development Approvals and this Agreement, (ii) constitute a prohibited modification under Section 12.5, (iii) increase building heights within the Property in comparison to what is identified in the Project Development Approvals and this Agreement, (iv) reduce the number of parking stalls identified in the Project Development Approvals by more than five (5) percent, (v) substantially deviate from the approved architectural design, as determined by the Community Development Director in his or her reasonable discretion, and/or (vi) reduce the amount of publicly accessible open space below 111,581 square feet.

**12.5 Prohibited Modifications**. Notwithstanding any provision of this Agreement or the Specific Plan, none of the following shall be permitted with respect to the Project during the Term of this Agreement:; (i) any modification to the square footage of the commercial space (10,000); (ii) any use of the commercial space other than restaurant space; or (iii) any reduction in the amount of publicly accessible open space below 111,581 square feet, except that a reduction of no more than 2.5% of the non-park open space area may be permitted if necessary based on Building Standards Code requirements as identified/required during the plan check process. No reduction to the square footage of the park (22,859 sq. ft.) shall be permitted.

**12.6 Hearing Rights Protected**. Notwithstanding the foregoing, City will process any change to this Agreement consistent with state law and will hold public hearings thereon if so required by state law and the parties expressly agree nothing herein is intended to deprive any party or person of due process of law.

**12.7 Effect of Amendment to Development Agreement**. Except as expressly set forth in writing in any such amendment, an amendment to this Agreement will not alter, affect, impair, modify, waive, or otherwise impact any other rights, duties, or obligations of either party under this Agreement.

**12.8 Timing of Development.** The California Supreme Court held in *Pardee Construction Co. v. City of Camarillo*, 37 Cal.3d 465 (1984), that failure of the parties in that case to provide for the timing of development resulted in a later adopted initiative restricting the timing of development to prevail over the parties' agreement. It is the intent of Developer and City to cure that deficiency by expressly acknowledging and providing that any Subsequent Land Use Regulations that purports to limit over time the rate or timing of development or to alter the sequencing of development phases (whether adopted or imposed by the City Council or through the initiative or referendum process) shall not apply to the Property or the Project and shall not prevail over this Agreement. In particular, but without limiting any of the foregoing, no numerical restriction shall be placed by the City on the amount of total square feet or the number of buildings, structures, residential units that can be built each year on the Property except as expressly provided in this Agreement.

## 13. MISCELLANEOUS PROVISIONS.

**13.1 Recordation**.

a. The City Clerk shall cause a copy of this Agreement to be recorded against the Property with the County Recorder within ten (10) calendar days after the Execution Date. The failure of the City to sign and/or record this Agreement shall not affect the validity of this Agreement.

~~13.1~~ b. Within ten (10) calendar days after the Execution Date, the Parties shall execute and record against the Property with the County Recorder any and all required documents to remove from title (i) the Original DA and (ii) the Minor Modification dated February 28, 2024.

**13.2 Notices.** Notices and correspondence required or permitted by this Agreement shall be in writing and either personally delivered or sent by registered, certified, or overnight mail or delivery service. Notices shall be deemed received upon personal delivery or on the second business day after registered, certified, or overnight mailing or delivery, or email if such email notice is acknowledged as received by the receiving party. Notices shall be addressed as follows:

To City: City of Carson
701 East Carson Street
Carson, California 90745
Attn: Planning Manager

With copy to: Aleshire & Wynder
~~18881 Von Karman Avenue, Suite 1700~~1 Park Plaza, Suite 1000
Irvine, CA 9261~~2~~4
Fax: 949-223-1180
Attn: Sunny Soltani

To ~~Developer~~Imperial Avalon: Imperial Avalon, LLC
4276 Katella Avenue, #231
Los Alamitos, CA 90720
Attn: Darren Embry

With copy to: Rand, Paster & Nelson, LLP
633 W. Fifth Street, ~~64th Floor~~ Ste 5880
Los Angeles, CA 90071
Attn: Dave Rand

To Lennar: Lennar Homes of California, LLC
2000 FivePoint, 3rd Floor
Irvine, CA 92618
Attention: JR Jones
Email: JR.Jones@lennar.com

With a copy to: Deverich & Gillman LLP
4 Park Plaza, Suite 520
Irvine, California 92614

Attention: Christopher D. Downs
Email: cdowns@dgllp.com

A Party may change its address by giving written notice to the other Party. Thereafter, Notices shall be addressed and transmitted to the new address.

**13.3 Estoppel Certificates.** Either Party (or a Mortgagee) may at any time deliver written notice to the other Party requesting an Estoppel Certificate stating:

a. The Agreement is in full force and effect and is a binding obligation of the Parties;

b. The Agreement has not been amended or modified or, if so amended, identifying the amendments; and

c. There are no existing defaults under the Agreement to the actual knowledge of the Party signing the Estoppel Certificate.

A Party receiving a request for an Estoppel Certificate shall provide a signed certificate to the requesting Party within thirty (30) days after receipt of the request. The City Manager may sign Estoppel Certificates on behalf of the City. An Estoppel Certificate may be relied on by assignees and Mortgagees.

**13.4 Operating Memoranda.** The provisions of this Agreement require a close degree of cooperation between City and Developer. During the Term of this Agreement, clarifications to this Agreement and the Applicable Laws may be appropriate with respect to the details of performance of the City and Developer. If and when from time to time during the Term of this Agreement, the City and Developer agree that such clarifications are necessary or appropriate, they shall effectuate such clarification through operating memoranda approved in writing by the City and Developer, which after execution, shall be attached hereto and become part of this Agreement and the same may be further clarified from time to time as necessary with future written approval by the City and Developer. Operating memoranda are mere ministerial clarifications and therefore public notices, hearings and CEQA compliance shall not be required unless otherwise provided by applicable law. The authority to enter into such operating memoranda is delegated to the Community Development Director who is hereby authorized to execute any operating memoranda hereunder without future action or approval by the City Council.

**13.5 Project as a Private Undertaking.** It is specifically understood and agreed by the Parties that the Project is a private development, that neither Party is acting as the agent of the other in any respect, and that each Party is an independent contracting entity with respect to this Agreement. The only relationship between City and Developer is that of a government entity regulating the development of property owned by a private party. City agrees that by its approval of, and entering into, this Agreement that it is not taking any action which would transform this private Development into a "public work" project, and that nothing herein shall be interpreted to convey upon Developer any benefit which would transform Developer's private project into a public work project, it being understood that this Agreement is entered into by City and Developer upon

the exchange of consideration described in this Agreement, including the Recitals to this Agreement, and that City is receiving by and through this Agreement the full measure of benefit in exchange for the burdens placed on Developer by this Agreement, including but not limited to Developer's obligation to provide the public improvements set forth herein.

**13.6 Eminent Domain.** No provision of this Agreement shall be construed to limit or restrict the exercise by City of its power of eminent domain.

**13.7 Entire Agreement.** This Agreement represents the entire agreement of the Parties with respect to the subject matter of this Agreement. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine the terms or conditions of this Agreement.

**13.8 Further Actions and Instruments.** Each of the Parties shall cooperate with and provide reasonable assistance to the other to the extent necessary to implement this Agreement.

**13.9 Severability.** If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform taking into consideration the purposes of this Agreement.

**13.10 Covenant Not To Sue.** The parties to this Agreement, and each of them, agree that this Agreement and each term hereof is legal, valid, binding, and enforceable. The parties to this Agreement, and each of them, hereby covenant and agree that each of them will not commence, maintain, or prosecute any claim, demand, cause of action, suit, or other proceeding against any other party to this Agreement, in law or in equity, or based on any allegation or assertion in any such action, that this Agreement or any term hereof is void, invalid, or unenforceable.

**13.11 Force Majeure.** Neither Party shall be deemed to be in default where failure or delay in performance of any of its obligations under this Agreement is caused by earthquakes, other acts of God, fires, wars, terrorism, riots or similar hostilities, strikes, and other labor difficulties beyond the Party's control, government regulations, pandemics, government-ordered quarantine, court actions (such as restraining orders or injunctions), or other causes beyond the Party's reasonable control. If any such events shall occur, the term of this Agreement and the time for performance shall be extended for the duration of the impacts on the Project of each such event.

**13.12 Waiver.** All waivers of performance must be in a writing signed by the Party granting the waiver. Failure by a Party to insist upon the strict performance of any provision of this Agreement shall not be a waiver of future performance of the same or any other provision of this Agreement.

**13.13 Time of Essence.** Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

**13.14 Governing Law and Venue.** This Agreement shall be governed and interpreted in accordance with California law, with venue for any litigation concerning this Agreement in Los Angeles, California.

**13.15 Interpretation.** This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting party or in favor of City shall not be employed in interpreting this Agreement, all parties having been represented by counsel in the negotiation and preparation hereof.

**13.16 Corporate Authority.** The person(s) executing this Agreement on behalf of each of the parties hereto represent and warrant that (i) such party, if not an individual, is duly organized and existing, (ii) they are duly authorized to execute and deliver this Agreement on behalf of said party, (iii) by so executing this Agreement such party is formally bound to the provisions of this Agreement, and (iv) the entering into this Agreement does not violate any provision of any other agreement to which such party is bound.

**13.17 Attorneys' Fees.** If either party to this Agreement is required to initiate or defend litigation against the other party, the prevailing party in such action or proceeding, in addition to any other relief which may be granted, whether legal or equitable, shall be entitled to reasonable attorneys' fees. Attorneys' fees shall include attorneys' fees on any appeal, and, in addition, a party entitled to attorney's fees shall be entitled to all other reasonable costs for investigating such action, taking depositions and discovery and all other necessary costs the court allows which are incurred in such litigation. All such fees shall be deemed to have accrued on commencement of such action and shall be enforceable whether or not such action is prosecuted to a final judgment.

**13.18 Recitals.** The recitals in this Agreement constitute part of this Agreement and each party shall be entitled to rely on the truth and accuracy of each recital as an inducement to enter into this Agreement.

**13.19 No Brokers.** City and Developer represent and warrant to the other that neither has employed any broker and/or finder to represent its interest in this transaction. Each party agrees to indemnify and hold the other free and harmless from and against any and all liability, loss, cost, or expense (including court costs and reasonable attorney's fees) in any manner connected with a claim asserted by any individual or entity for any commission or finder's fee in connection with this Agreement arising out of agreements by the indemnifying party to pay any commission or finder's fee.

**13.20 Joint and Several Liability.** In the event Developer should sell, transfer, lease or assign this Agreement, the Property, or any part thereof, Developer shall bear ultimate responsibility for all obligations, conditions, and restrictions set forth under this Agreement, it being understood that both Developer and any transferee, assignee, or lessee shall be jointly and severally liable.

**13.21 Compliance with Laws**. Developer must comply with all applicable provisions of federal, state and local laws and regulations, including the City's Municipal Code.

**13.22 Counterparts**. This Agreement may be executed by the Parties in counterparts, which together shall have the same effect as if each of the Parties had executed the same instrument.

[SIGNATURES ON FOLLOWING PAGE(S)]

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the day and year first set forth above.

**CITY**

CITY OF CARSON a municipal corporation

_____

Lula Davis-Holmes, Mayor

ATTEST

_____

Dr. Khaleah K. Bradshaw, City Clerk

APPROVED AS TO FORM
ALESHIRE & WYNDER, LLP

_____

Sunny K. Soltani, City Attorney

**IMPERIAL AVALON**

IMPERIAL AVALON, LLC, a California limited liability company

By: _____

_____

Name:
Title:

By: _____

_____

Name:
Title:

**LENNAR**

LENNAR HOMES OF CALIFORNIA, LLC, a California limited liability company

By: _____

_____

Name:
Title:

By: _____

_____

Name:
Title:

~~DEVELOPER~~

~~IMPERIAL AVALON, LLC, a California limited liability company~~

~~By: _____~~
~~Name:~~
~~Title:~~

~~By:~~ _____
~~Name:~~
~~Title:~~

**If Developer is a limited liability company, any one of the following options will satisfy City's signature requirements pursuant to the Corporations Code. Option A: One signature required from each of the following groups: 1) Chairman of the Board, President or any Vice President; and 2) Secretary, any Assistant Secretary, Chief Financial Officer or any Assistant Treasurer. Option B: Signatures required from two managers unless the LLC is managed by one manager per its articles of organization, in which case only one signature from that manager is required. Option C: One signature required from any member unless the LLC is manager-managed per its articles of organization. Option D: One signature required from any manager if the LLC is manager-managed per its articles of organization. DEVELOPER'S SIGNATURES SHALL BE DULY NOTARIZED, AND APPROPRIATE ATTESTATIONS SHALL BE INCLUDED AS MAY BE REQUIRED BY THE BYLAWS, ARTICLES OF ORGANIZATION, OR OTHER RULES OR REGULATIONS APPLICABLE TO DEVELOPER'S BUSINESS ENTITY.**

## CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document.

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On _____, 2026 before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____

**OPTIONAL**

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

**CAPACITY CLAIMED BY SIGNER**

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER

_____
TITLE(S)

- ☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
- ☐ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR
- ☐ OTHER_____

_____

**SIGNER IS REPRESENTING:**
(NAME OF PERSON(S) OR ENTITY(IES))

_____
_____

**DESCRIPTION OF ATTACHED DOCUMENT**

_____
TITLE OR TYPE OF DOCUMENT

_____
NUMBER OF PAGES

_____
DATE OF DOCUMENT

_____
SIGNER(S) OTHER THAN NAMED ABOVE

## CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy or validity of that document.

STATE OF CALIFORNIA

COUNTY OF LOS ANGELES

On _____, 2026 before me, _____, personally appeared _____, proved to me on the basis of satisfactory evidence to be the person(s) whose names(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature: _____

**OPTIONAL**

Though the data below is not required by law, it may prove valuable to persons relying on the document and could prevent fraudulent reattachment of this form.

**CAPACITY CLAIMED BY SIGNER**

- ☐ INDIVIDUAL
- ☐ CORPORATE OFFICER

_____
TITLE(S)

- ☐ PARTNER(S) ☐ LIMITED ☐ GENERAL
- ☐ ATTORNEY-IN-FACT
- ☐ TRUSTEE(S)
- ☐ GUARDIAN/CONSERVATOR
- ☐ OTHER_____

_____

**SIGNER IS REPRESENTING:**
(NAME OF PERSON(S) OR ENTITY(IES))

_____
_____

**DESCRIPTION OF ATTACHED DOCUMENT**

_____
TITLE OR TYPE OF DOCUMENT

_____
NUMBER OF PAGES

_____
DATE OF DOCUMENT

_____
SIGNER(S) OTHER THAN NAMED ABOVE

**EXHIBIT "A"**

**PROPERTY LEGAL DESCRIPTION**

**[updated legal description will be added]**

~~THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE CITY OF CARSON IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:~~

~~LOT 1 OF TRACT NO. 71206, IN THE CITY OF CARSON, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 1400, PAGES 1 TO 6 OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.~~

~~EXCEPT THEREFROM PORTIONS OF SAID LAND ALL MINERALS, OIL, GAS, AND OTHER HYDROCARBON SUBSTANCES LYING BELOW THE SURFACE OF SAID LAND, AS EXCEPTED IN DEED RECORDED DECEMBER 08, 1960 AS INSTRUMENT NO. 1520 OFFICIAL RECORDS, AND IN DEED RECORDED MAY 18, 1959 AS INSTRUMENT NO. 590 OFFICIAL RECORDS.~~

~~APN: 7337-001-025~~

~~APN: 7337-001-026~~

~~APN: 7337-001-027~~

~~APN: 7337-001-028~~

~~APN: 7337-001-029~~

**EXHIBIT "B"**

**DEPICTION OF THE PROPERTY**

[updated depiction will be added]



**EXHIBIT "C"**

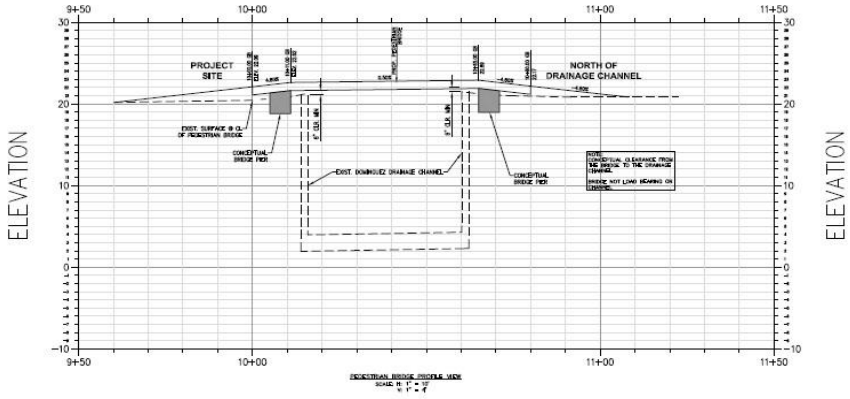
**PUBLIC OPEN SPACE AREAS**

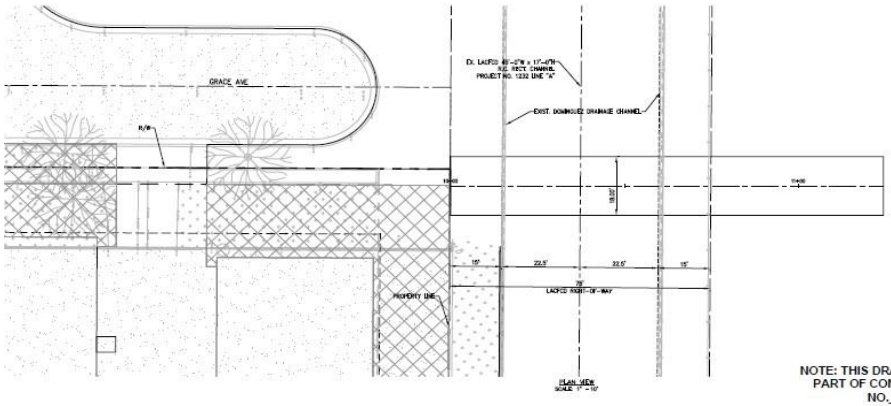


[updated image will be added]

# EXHIBIT "D"

## ~~PEDESTRIAN BRIDGE~~




NOTE: THIS DRAWING IS ATTACHED TO AND MADE PART OF CONCEPTUAL APPROVAL TRACKING NO. FCDP2021000318 , 08/18/2021 .

~~EXHIBIT "E"~~

AMENDED AND RESTATED COAS

[TO BE ADDED]

## EXHIBIT "~~F~~E"

## EXCERPTS FROM 2022 CALIFORNIA MECHANICAL CODE (INCLUDING THE JULY 1, 2024 SUPPLEMENT)



**1104.6 Group A2L Refrigerants for Human Comfort.** *High-probability systems using Group A2L refrigerants for human comfort applications shall comply with this section. [ASHRAE 15:7.6]*

**1104.6.1 Refrigerant Concentration Limits.** *Occupied spaces shall comply with the releasable charge limitations of the equipment listing and ASHRAE 15. Unoccupied spaces with refrigerant containing equipment, not including continuous piping or tubing, shall comply with the releasable charge limitations of the equipment listing or Section 1104.6.4. {ASHRAE 15:7.6.1-7.6.1.2}*

**1104.6.2 Listing and Installation Requirements.** *Refrigeration systems shall be listed and shall be installed in accordance with listing, the manufacturer's instructions, and any markings on the equipment restricting the installation. [ASHRAE 15:7.6.2]*

**1104.6.2.1 Nameplate.** *The nameplate required by Section 1115.5 shall include a symbol indicating that a flammable refrigerant is used, as specified by the product listing. [ASHRAE 15:7.6.2.1]*

**1104.6.2.2 Labeling.** *A label indicating a flammable refrigerant is used shall be placed adjacent to service ports and other locations where service involving components containing refrigerant is performed, as specified by the product listing. [ASHRAE 15:7.6.2.2]*

**1104.6.2.3 Refrigerant Detection Systems.** *Refrigerant detection systems shall be in accordance with the listing and ASHRAE 15.*

**1104.6.2.4 Refrigerant Concentration Above Limit.** *When the refrigerant detection system senses a refrigerant exceeding its setpoint, the following actions shall be taken:*

*(1) The supply air fan of the equipment shall activate with a minimum airflow rate specified by the manufacturer.*

*(2) Turn off the compressor and all other electrical devices, excluding the control power transformers, control systems, and the supply air fan. The supply air fan shall continue to operate for at least five minutes after the refrigerant detection system has sensed a drop in the refrigerant concentration below the value specified in Section 1104.6.6(b).*

*Exception: The compressor operation shall not be turned off when the compressor operation reduces the leak rate or the total amount of released refrigerant to the indoor space.*

*(3) Any device that controls airflow located within the product or in ductwork that supplies air to the occupied space shall be fully open. Any device that controls airflow shall be listed.*

*(4) Mitigation action required by the equipment listing shall be initiated {ASHRAE 15:7.6.2.4}*

# DRAFT

## AMENDED AND RESTATED CONDITIONS OF APPROVAL (EXHIBIT D TO AMENDED AND RESTATED DEVELOPMENT AGREEMENT 23-19)

## EXHIBIT B TO PLANNING COMMISSION RESOLUTION NO. 22-244 - CONDITIONS OF APPROVAL (SITE PLAN AND DESIGN REVIEW No. DOR 1803-19)

These "Conditions of Approval" shall govern the development of the Imperial Avalon Site Plan within the Imperial Avalon Specific Plan ("Specific Plan"), located at 21207 Avalon Boulevard in the City of Carson ("Project Site"). The "Project" consists of 1,115 residential dwelling units, 10,000 square feet of restaurant uses and 111,581 square feet of publicly accessible, privately maintained open space. The Project is proposed by the "Applicant" which currently **(as of the date of Planning Commission Resolution No. 22-244)** consists of Imperial Avalon, LLC which term shall include the successors and assigns of the Applicant (aka, the "Developer).

## GENERAL CONDITIONS

1. The Applicant shall sign an Affidavit of Acceptance form and submit the document to the Planning Division within 30 days of receipt of the City Council Resolution approving the amendment to the Specific Plan.

2. The adopted Ordinance approving the Specific Plan, including the Conditions of Approval contained herein, and the signed Affidavit of Acceptance, shall be copied in their entirety and placed directly onto a separate plan sheet behind the cover sheet of the development plans prior to Building and Safety plan check submittal. Said copies shall be included in all development plan submittals, including any revisions and the final working drawings.

3. These Conditions of Approval shall be subject to the terms and conditions of the Imperial Avalon Specific Plan, Final Environmental Impact Report (FEIR), Mitigation Monitoring and Reporting Program (MMRP), and Development Agreement (DA). In the event of a conflict between these Conditions of Approval and the Development Agreement the Development Agreement shall control.

4. Prior to Building and Safety plan check submittal and prior to issuance of building permits, the Applicant shall submit a complete set of electronic Construction Drawings that conform to all the Conditions of Approval to be reviewed and approved by the Planning Division.

5. The Applicant shall comply with all Mitigation Measures, Project Design Features, and Project Characteristics as described in the Final Environmental Impact Report and MMRP.

6. The Applicant shall make any necessary site plan and design revisions to the site plan and elevations approved by the Planning Commission, City Council, and these conditions of approval. All plans shall be consistent with all project approvals.

7. City Approvals. All approvals by City, with respect to the Project and/or the Conditions of Approval set forth herein, unless otherwise specified, shall be by the department head of the department or agency requiring the applicable condition. All agreements, covenants, easements, deposits and other documents required herein where City is a party shall be in a form approved by the City Attorney. The Applicant shall pay the cost for review and approval of such agreements and deposit necessary funds pursuant to the First Amended Reimbursement Agreement, between the City and Imperial Avalon, LLC, dated June 1, 2022 (as amended or modified from time to time, the "Reimbursement Agreement").

8. Reimbursement Agreement. A trust deposit account shall be established and maintained pursuant to the Reimbursement Agreement.

9. Indemnification. The Applicant, and its tenant(s), for themselves and their successors in interest ("Indemnitors"), agree to defend, indemnify and hold harmless the City of Carson, its agents, officers and employees, and each of them ("Indemnitees") as set forth in the DA from and against any and all claims, liabilities, damages, losses, costs, fees, expenses, penalties, errors, omissions, forfeitures, actions, and proceedings(collectively, "Claims") against Indemnitees with respect to the Project entitlements or approvals that are the subject of these Conditions of Approval, and any Claims against Indemnitees which are in any way related to Indemnitees' review of or decision upon the Project that is the subject of these Conditions of Approval (including, without limitation, any Claims related to any finding, determination, or claim of exemption made by Indemnitees pursuant to the requirements of the California Environmental Quality Act, or other local or State Agencies, and any Claims against Indemnitees which are in any way related to any damage or harm to people or property, real or personal, arising from Indemnitors' construction or operations of the Project, I, or any of the Project entitlements or other approvals that are the subject of Conditions of the Approvals for the Specific Plan, Site Plan and Design Review and Tentative Tract Map. The City will promptly notify Indemnitors of any such claim, action or proceeding against Indemnitees, and, at the option of the City, Indemnitors shall either undertake the defense of the matter or pay Indemnitees associated legal costs or shall advance funds assessed by the City to pay for the defense of the matter by the City Attorney. In the event the City opts for Indemnitors to undertake defense of the matter, the City will cooperate reasonably in the defense, but retains the right to settle or abandon the matter without Indemnitors' consent. Indemnitors shall provide a deposit to the City in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of

litigation / Claims asserted, including the cost of any award of attorneys' fees, and shall make additional deposits as requested by the City to keep the deposit at such level. If Indemnitors fail to provide or maintain the deposit, Indemnitees may abandon the action and Indemnitors shall pay all costs resulting therefrom and Indemnitees shall have no liability to Indemnitors.

**SPECIAL CONDITIONS**

10. Avalon Street Improvements. Prior to issuance of any building permits, the developer shall prepare plans and obtain approval from the City for installation of street improvements along their Avalon Boulevard street frontage consistent with the Carson Street Master Plan improvements, the Union South bay project, and as identified in the DIF Nexus Study prepared by Kelly Associates Management Group and dated March 19, 2019, and approved by the City Council on April 2, 2019, along with all reports, studies, assessments and memorandums referenced within that study(collectively the "DIF Nexus Study") including parkway and median landscaping, hardscaping, and street furniture including bike racks, streetlights, benches, way finding signs, etc. All improvements shall be completed prior to issuance of the occupancy permit for the first apartment building or any townhomes, whichever occurs earlier.

11. Grace Avenue Improvements. Prior to issuance of building permits, the developer shall prepare plans and obtain approval from the City for installation of street improvements along their street frontage improvements for Grace Avenue consistent with the approved plans. All improvements shall be completed prior to issuance of the occupancy permit for the first townhome.

12. Bicycle Lane Improvements. Prior to issuance of building permits, the developer shall prepare plans and obtain approval from the City for installation of bicycle lanes along Avalon Boulevard and 213th Street identified in the DIF Nexus Study. All improvements shall be completed prior to issuance of the occupancy permit for the first apartment building or any townhomes, whichever occurs earlier.

13. The Site Plan and Design Review approval shall not be effective until such time the City Council approves the Specific Plan, Development Agreement, General Plan Amendment, and Zone Change and said documents are legally effective.

14. The final Construction Documents shall comply with the provisions and requirements of the Development Agreement, the Specific Plan and final approved Site Plan.

15. The applicant shall ensure that the fugitive dust control program is implemented during construction. The program shall be depicted on the construction drawings/grading plans and the contractor shall be responsible for implementation.

16. Adequate measures shall be taken to eliminate odors during the grading operations ~~as a result of the site being a former landfill~~ to the satisfaction of the Community Development Director.

17. ~~The Development Agreement Fee and all other fees~~ **Fees** shall be paid in appropriate times as specified in the Development Agreement and the Conditions of Approval.

**LANDSCAPE / IRRIGATION**

18. Landscaping shall conform to the provisions contained in the Specific Plan and all City codes regarding water conservation.

19. Prior to issuance of ~~any~~ building permits **for the Apartments,** the Applicant shall provide **onsite** landscape plans **for the Apartments** to the Planning Division for review and approval ~~for all areas of the site.~~ **Prior to issuance of building permits for the Townhomes, the Applicant shall provide onsite landscape plans for the Townhomes to the Planning Division for review and approval.** ~~In lieu of installation of the entire landscaping on the site prior to issuance of occupancy permits, t~~ The Community Development Director ~~may~~ **shall** approve a phased landscape installation plan **as submitted by the developer of the Townhome and/or Apartment component of the project** to ~~require~~ **allow** a phased installation of landscaping prior to issuance of occupancy permits of various portions of the project.

20. Installation, maintenance, and repair of all **onsite** landscaping shall be the responsibility of the Applicant **for each phase.** ~~All landscaping shall be installed prior to issuance of any occupancy permits. The Community Development Director may approve a phased installation of the landscaping.~~

21. Landscaping shall be provided with a permanently installed, automatic irrigation system and operated by an electrically-timed controller station set for early morning or late evening irrigation per the Specific Plan.

22. Installation of 6" high concrete curbs are required around all landscaped planter areas, except for areas determined by National Pollutant Discharge Elimination System(NPDES) permit or other applicable condition of approval that requires certain landscaped areas to remain clear of concrete curbs for more efficient storm water runoff flow and percolation as deemed necessary by the City Engineer. Revised landscaping and irrigation plans shall be reviewed and approved by the Planning Division should subsequent modifications be required by other concerned agencies regarding the removal of concrete curbs.

23. The proposed irrigation system shall include best water conservation practices.

24. Backflows shall be screened with min. 5' wide planters and landscape screen material, with plant material per the Specific Plan. Paint device green color similar to Frazee, aeroplate 'Forest Green' or equal. Transformers shall be screened with shrubs and ground covers, with plant material per the Specific Plan.

25. The Project shall comply with AB 325, the State Model Water Efficient Landscape Ordinance. Maximum Applied Water Allowance, MAWA, and Estimated Applied Water Use shall be calculated and submitted on all landscape construction documents.

26. All walls that include creeping vines shall be installed on the project side of the wall and shall be passed through the walls to the opposite side by drilling holes on wall or by other method as approved by the Planning Division.

27. Show corner sight line distances on the landscape plan per Engineering Department Standard Drawings.

**WALLS / FENCES**

28. Prior to the issuance of any building permits **for the Apartments,** the applicant shall submit a Wall and Fence Plan **for the Apartments** to the Planning Division for review and approval by the Planning and Building Divisions ~~for all areas of the site.~~ **Prior to the issuance of any building permits for the Townhomes, the applicant shall submit a Wall and Fence Plan for the Townhomes to the Planning Division for review and approval by the Planning and Building Divisions.** The plans shall indicate materials colors and height of proposed and existing walls and fences and shall include a cross section of walls and fences indicating adjacent grades. Walls shall be consistent with the requirements of the Specific Plan. In lieu of construction of walls and fences ~~on the site~~ prior to issuance of any occupancy permits, the Community Development Director ~~may~~ **shall** approve a phased construction plan for the walls and fences **as submitted by the developer of the Townhome and/or Apartment component of the project to allow for phased construction of all walls and fences** prior to issuance of occupancy permits of various portions of the project.

29. All walls shall include graffiti-resistant coating.

**LIGHTING**

30. All exterior lighting and sign lighting shall be provided in compliance with the standards pursuant to the Specific Plan.

31. Two sets of **onsite** lighting plans **for the Apartments** are to be drawn, stamped, and signed by a licensed lighting consultant **or an electrical engineer** and submitted and approved by the Planning Division prior to the issuance of building permits **for the Apartments. Two sets of onsite lighting plans for the Townhomes are to be drawn,**

**stamped, and signed by a licensed lighting consultant or an electrical engineer and submitted and approved by the Planning Division prior to the issuance of building permits for the Townhomes.** In lieu of installation of all lights on the site prior to issuance of any occupancy permits, the Community Development Director ~~may~~ **shall** approve a phased installation plan **as submitted by the developer of the Townhome and/or Apartment component of the project to allow** for the **phased installation of** lights prior to issuance of occupancy permits of various portions of the project.

32. All lighting within the Project shall be directed on-site in such a manner as to not create a nuisance or hazard to adjacent streets and properties, which shall be subject to the approval of the Planning Division.

**SIGNAGE**

33. Prior to issuance of any ~~building~~ **certificates of occupancy** ~~permits~~ **for the Apartments,** the Applicant shall submit a Comprehensive Sign Program **for the Apartments** consistent with the Specific Plan and Development Agreement. **Prior to issuance of any certificates of occupancy for the Townhomes, the Applicant shall submit a Comprehensive Sign Program for the Townhomes consistent with the Specific Plan and Development Agreement. The Comprehensive Sign Program shall reflect a consistent design aesthetic between the Apartments and the Townhomes.**

34. Prior to issuance of ~~building~~ **any certificates of occupancy** ~~permits,~~ the Applicant shall provide plans to the Planning Division for approval of entry monument signage consistent with the Comprehensive Sign Program.

35. Prior to issuance of ~~building~~ **any certificates of occupancy** ~~permits~~ **for the Apartments,** the Applicant shall provide plans to the Planning Division for approval of Directional/wayfinding signage consistent with the Comprehensive Sign Program **for the Apartments. Prior to issuance of any certificates of occupancy for the Townhomes, the Applicant shall provide plans to the Planning Division for approval of Directional/wayfinding signage consistent with the Comprehensive Sign Program for the Townhomes.**

36. ~~All signs shall be installed prior of any issuance of occupancy permits.~~ In lieu of installation of all signage on the site prior to issuance of any occupancy permits, the Community Development Director ~~may~~ **shall** approve a phased installation plan **as submitted by the developer of the Townhome and/or Apartment component of the project to allow** for the **phased installation of** signs prior to issuance of occupancy permits of various portions of the project.

**PARKING**

37. Prior to issuance of occupancy of the first apartment building, the Applicant shall prepare, submit for City's approval, fund and operate a parking management program for on-site parking monitoring and Grace Avenue parking monitoring. The program will be required to ensure that residents and visitors park in appropriate parking stalls. Imperial Avalon residents and guest shall be prohibited from parking on Grace Avenue or other residential streets of the surrounding community.

38. All parking areas and driveways shall remain clear. No encroachment into parking areas and/or driveways shall be permitted.

39. All areas used for the movement, parking, loading, repair or storage of vehicles shall be paved with either: a. Concrete or asphaltic concrete to a minimum thickness of three and one-half inches over four inches of crushed aggregate base; or b. Other surfacing material which, in the opinion of the Director of Public Works, provides equivalent life, service and appearance.

**TRASH**

40. Trash collection shall comply with the requirements of the City's trash hauler.

41. Submit development plans for plan check review and approval prior to issuance of permits.

42. Obtain all appropriate permits and an approved final inspection for the proposed Project.

**ENGINEERING SERVICES DEPARTMENT - CITY OF CARSON**

41. Any existing off-site improvements damaged during the construction shall be removed and reconstructed per City of Carson PW Standard Drawings and to the satisfaction of the City Engineer.

42. A construction permit is required for any work to be done in the public right-of-way.

43. The Applicant shall comply with street improvements and all other requirements included in the Development Agreement.

44. The Applicant shall comply with all conditions and requirements imposed in connection with recordation of the Final Tract Map by the County of Los Angeles Department of Public Works and/or the ~~County of Los Angeles Department of Public Works~~ **City,** as approved by the City Engineer.

*Prior to Certificate of Occupancy*

45. The developer shall ensure the signal at the intersection of Avalon Boulevard and the main project entry is operational, at the developer's expense, to the satisfaction of the City Engineer.

46. The Applicant shall comply with all requirements from L.A. County Sewer Maintenance Division for Maintenance of new and/or existing sewer main, relating to this development, prior to release of all improvement bonds.

47. The Applicant shall execute and provide to the City Engineer, a written statement from the water purveyor (Calwater) indicating that the water system will be operated by the purveyor and that under normal conditions, the system will meet the requirements for the development and that water service will be provided to each building. Comply with mitigation measures required by the water purveyor.

48. The Applicant shall construct and guarantee the construction of all required drainage infrastructures in accordance with the requirements and recommendations of the hydrology study, subject to the approval of the City Engineer.

49. If needed, easements shall be granted to the City, appropriate agency, or entity for the purpose of ingress, egress, construction, and maintenance of all infrastructures constructed and handicap access for this development to the satisfaction of the City Engineer and or appropriate agency or entity.

50. All infrastructure necessary to serve the ~~Project~~ **Townhomes** (water, sewer, storm drain, and street improvements) **shall be in operation prior to issuance of any certificates of occupancy for the Townhomes. All infrastructure necessary to serve either Apartment building (water, sewer, storm drain, and street improvements) shall be in operation prior to the issuance of certificates of occupancy for the respective Apartment building.** ~~shall be in operation prior to the issuance of Certificate of Occupancy of any building.~~

**PUBLIC WORKS – WATER QUALITY**

*Prior to Issuance of Building Permit*

51. The Applicant shall comply with all applicable Low Impact Development ("LID") requirements and shall include Best Management Practices ("BMP") necessary to control storm water pollution from construction activities and facility operations to the satisfaction of the City Engineer.

52. Applicant shall complete and provide a BMP Reporting Template to City of Carson, Engineering Services Department.

53. Applicant shall provide contact information of the Qualified Storm Water Developer ("QSD") and/or Qualified SWPPP (Storm Water Pollution Prevention Plan) Developer ("QSP") for the Project Site.

54. Applicant shall submit digital copies of SUSMP/LID/NPDES/Grading Plans ~~concurrently~~ to City of Carson, Engineering Services Department ~~and Los Angeles County Building & Safety Division~~.

55. Applicant shall complete, sign and return the Stormwater Planning Program LID Plan Checklist form and return to City of Carson Engineering Services Division.

*Prior to Certificate of Occupancy*

56. For any structural and/or treatment water quality control device installed, the Applicant, shall record a maintenance covenant pursuant to Section 106.4.3 of the County of Los Angeles Building Code and title 12, Chapter 12.80 of the Los Angeles County Code relating to the control of pollutants carried by storm water runoff. In addition, an exhibit shall be attached to such covenant to identify the location and maintenance information for any structural and/or treatment control device installed. a) The Maintenance Covenant shall be reviewed and approved by the City Engineer prior to recordation with the Los Angeles County Registrar-Recorder/County Clerk. b) RECORDATION of the Maintenance Covenant is the responsibility of the Applicant. Provide a copy of the recorded Covenant Agreement to City Engineer prior to certificate of occupancy for any building.

57. Inspection will be conducted once a year after any portions of the Project are constructed.

**FIRE DEPARTMENT**

58. The proposed development for the Project shall obtain approval and comply with all Los Angeles County Fire Department requirements.

**DEVELOPMENT AGREEMENT FEE**

59. ***Interim Development Impact Fee:*** In accordance with Article XI (Interim Development Impact Fee Program) of the Carson Municipal Code ("CMC"), the applicant, property owner, and/or successor to whom this project approval is assigned ("Developer") shall be responsible for payment of one-time interim development impact fees ("IDIF") at the applicable rate detailed below for each unit of residential development constructed for the project. If the project increases or decreases in regards to the number of units constructed, the total IDIF amount will be adjusted accordingly at the applicable rate.

Per CMC 11504, the IDIF shall be paid prior to the issuance of a certificate of occupancy for the specific Townhome or Apartment building or up to twelve (12) months following

the issuance of the building permit for the specific Townhome or Apartment building, whichever occurs first, and the applicable IDIF rate (detailed below) shall be that in effect at the time of such payment, unless the timing or requirements of payment is modified by applicable State Law. No certificate of occupancy shall be issued prior to the full payment of the required IDIF amount, which payment shall be made in one lump sum installment. IDIF amounts/rates are subject to adjustment every July 1st based on State of California Construction Cost Index (Prior March to Current March Adjustment), per CMC Section 11500.

IDIF amounts/rates for residential development have been set at $16,918.01 per unit (1 bedroom or studio) and $21,147.52 (All Other) per unit for Fiscal Year 2025-26, effective July 1, 2025, through June 30, 2026. Affordable Housing Units are exempted from IDIF. Based on these rates, the Developer would be responsible for a total payment of IDIF for the proposed project in an amount calculated as follows: the applicable rate per unit multiplied by 1,115, for 1,115 Residential Units, subject to any applicable fee offsets to which Developer might be entitled under Carson Municipal Code Sections 11800-11804.

However, if the IDIF for the project is not paid in 2025-26 fiscal year (i.e., by June 30, 2026), a new IDIF rate/amount will apply for the period of July 1, 2026, through June 30, 2027, based on the IDIF rate for Fiscal Year 2026-27, and so on for subsequent fiscal year(s). The fee for Fiscal Year 2026-2027 IDIF has not yet been determined.

To understand the requirements in more detail, please visit the City's IDIF webpage at: https://ci.carson.ca.us/communitydevelopment/IDIFProgram.aspx and/or contact James Nguyen at jnguyen@carsonca.gov or 310-952-1700 ext. 1310.

***Notice of Imposition of Interim Development Impact Fees; Right to Protest***

Pursuant to CMC Section 11503, Developer is hereby notified of the IDIF imposed on the project, as described and in the amount stated above. In accordance with Government Code Section 66020, Developer may protest the imposition of the IDIF on the project by complying with the requirements set forth in CMC 11900. Any such protest shall be filed at the time of the approval or conditional approval of a development, as that phrase is defined in CMC 11901(A).

If you have any questions or comments regarding this notice, please contact James Nguyen at jnguyen@carsonca.gov or (310) 952-1700 ext. 1310.

**EXHIBIT C TO PLANNING COMMISSION RESOLUTION NO. 22-244, AS AMENDED BY CITY COUNCIL RESOLUTION NO. 22-242 - CONDITIONS OF APPROVAL (VESTING TENTATIVE TRACT MAP 83157)**

These "Conditions of Approval" shall govern the development of the Imperial Avalon Vesting Tentative Tract Map ("VTTM"), located at 21207 Avalon Boulevard in the City of Carson ("Project Site"). The "Project" consists of a mixed use project including 1,115 residential dwelling units, 10,000 square feet of restaurant area, and 111,581 square feet of publicly accessible but privately maintained open space within the Imperial Avalon Specific Plan. The Project is proposed by the "Applicant" which currently **(as of the date of Planning Commission Resolution No. 22-244, as amended by City Council Resolution No. 22-242)** consists of Imperial Avalon, LLC which term shall include the successors and assigns of the Applicant (aka, the "Developer").

**GENERAL CONDITIONS**

1. The Applicant shall sign an Affidavit of Acceptance form and submit the document to the Planning Division within 30 days of receipt of the City Council Resolution approving the amendment to the Specific Plan.

2. The adopted Ordinance approving the Specific Plan, including the Conditions of Approval contained herein, and the signed Affidavit of Acceptance, shall be copied in their entirety and placed directly onto a separate plan sheet behind the cover sheet of the development plans prior to Building and Safety plan check submittal. Said copies shall be included in all development plan submittals, including any revisions and the final working drawings.

3. These Conditions of Approval shall be subject to the terms and conditions of the Imperial Avalon Specific Plan, Final Environmental Impact Report (FEIR), Mitigation Monitoring and Reporting Program (MMRP), and Development Agreement (DA). In the event of a conflict between these Conditions of Approval and the Development Agreement the Development Agreement shall control.

4. Prior to recordation of the map, the Applicant shall submit a vesting tentative map that complies with the approvals by the Planning Commission, City Council, these conditions of approval, City of Carson Public Works Department, and the County of Los Angeles. All plans shall be consistent with all project approvals.

5. The Applicant shall comply with all City, county, state, and federal regulations applicable to the Project.

6. The Applicant shall comply with all Mitigation Measures, Project Design Features, and Project Characteristics as described in the Final Environmental Impact Report and MMRP.

7. City Approvals. All approvals by City with respect to the Project and/or the Conditions of Approval set forth herein, unless otherwise specified, shall be by the department head of the department or agency requiring the applicable condition. All agreements, covenants, easements, deposits and other documents required herein where City isa party shall be in a form approved by the City Attorney. The Applicant shall pay the cost for review and approval of such agreements and deposit necessary funds pursuant to the First Amended and Restated Reimbursement Agreement, between the City, and Faring Capital, LLC, dated June 1, 2022 (as amended or modified from time to time, the "Reimbursement Agreement").

8. Reimbursement Agreement. A trust deposit account shall be established and maintained pursuant to the Reimbursement Agreement.

9. Indemnification. The Applicant, and its tenant(s), for themselves and their successors in interest ("Indemnitors"), agree to defend, indemnify and hold harmless the City of Carson, its agents, officers and employees, and each of them ("Indemnitees") as set forth in the DA from and against any and all claims, liabilities, damages, losses, costs, fees, expenses, penalties, errors, omissions, forfeitures, actions, and proceedings(collectively, "Claims") against Indemnitees with respect to the Project entitlements or approvals that are the subject of these Conditions of Approval, and any Claims against Indemnitees which are in any way related to Indemnitees' review of or decision upon the Project that is the subject of these Conditions of Approval (including, without limitation, any Claims related to any finding, determination, or claim of exemption made by Indemnitees pursuant to the requirements of the California Environmental Quality Act or other local or State Agencies, and any Claims against Indemnitees which are in any way related to any damage or harm to people or property, real or personal, arising from Indemnitors' construction or operations of the Project, including site improvements and other associated improvements. or any of the Project entitlements or other approvals that are the subject of Conditions of the Approvals for the Specific Plan, Site Plan and Design Review and Tentative Tract Map. The City will promptly notify Indemnitors of any such claim, action or proceeding against Indemnitees, and, at the option of the City, Indemnitors shall either undertake the defense of the matter or pay Indemnitees associated legal costs or shall advance funds assessed by the City to pay for the defense of the matter by the City Attorney. In the event the City opts for Indemnitors to undertake defense of the matter, the City will cooperate reasonably in the defense, but retains the right to settle or abandon the matter without Indemnitors' consent. Indemnitors shall provide a deposit to the City in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of litigation / Claims asserted, including the cost of any award of attorneys' fees, and shall make additional deposits as requested by the City to keep the deposit at such level. If Indemnitors fail to provide or maintain the deposit, Indemnitees may abandon the action and Indemnitors shall pay all costs resulting therefrom and Indemnitees shall have no liability to Indemnitors.

**SPECIAL CONDITIONS**

10. No demolition or grading permits shall be issued prior to Vesting Tentative Tract Map clearance by City of Carson Building & Safety. ~~Los Angeles County Department of Public Works~~

11. Avalon Street Improvements. Prior to issuance of any building permits, the developer shall prepare plans and obtain approval from the City for installation of street improvements along their Avalon Boulevard street frontage consistent with the Carson Street Master Plan improvements, the Union Southbay project, and as identified in the DIF Nexus Study prepared by Kelly Associates Management Group and dated March 19, 2019, and approved by the City Council on April 2, 2019, along with all reports, studies, assessments and memorandums referenced within that study (collectively the "DIF Nexus Study") including parkway and median landscaping, hardscaping, and street furniture including bike racks, streetlights, benches, wayfinding signs, etc. All improvements shall be completed prior to issuance of the occupancy permit for the first apartment building or any townhomes, whichever occurs earlier.

12. Grace Avenue Improvements. Prior to issuance of building permits, the developer shall prepare plans and obtain approval from the City for installation of street improvements along their street frontage improvements for Grace Avenue consistent with the approved plans. All improvements shall be completed prior to issuance of the occupancy permit for the first townhome.

13. Bicycle Lane Improvements. Prior to issuance of building permits, the developer shall prepare plans and obtain approval from the City for installation of bicycle lanes along Avalon Boulevard and 213th Street identified in the DIF Nexus Study and per the City's Complete Streets Policy and Public Works Designs. All improvements shall be completed prior to issuance of the occupancy permit for the first apartment building or any townhomes, whichever occurs earlier.

14. The Vesting Tentative Tract Map approval shall not be effective until such time the City Council approves the Specific Plan, Development Agreement, General Plan Amendment, and Zone Change and said documents are legally effective.

15. The final Construction Documents shall comply with the provisions and requirements of the Development Agreement, the Specific Plan and final approved Site Plan.

16. The applicant shall ensure that the fugitive dust control program is implemented during construction. The program shall be depicted on the construction drawings/grading plans and the contractor shall be responsible for implementation.

17. Adequate measures shall be taken to eliminate odors during the grading operations ~~as a result of the site being a former landfill~~ to the satisfaction of the Community Development Director.

18. ~~The Development Agreement Fee and all other fees~~ **Fees** shall be paid in appropriate times as specified in the Development Agreement and the Conditions of Approval.

**BUILDING AND SAFETY DIVISION**

19. Submit development plans for plan check review and approval prior to issuance of permits.

20. Obtain all appropriate permits and an approved final inspection for the proposed Project.

**ENGINEERING SERVICES DEPARTMENT – CITY OF CARSON**

21. Any existing off-site improvements damaged during the construction shall be removed and reconstructed per City of Carson PW Standard Drawings and to the satisfaction of the City Engineer.

26. A construction permit is required for any work to be done in the public right-of-way.

27. The Applicant shall comply with all conditions and requirements recommended or imposed by the County of Los Angeles (Dept. of Public Works) in connection with Vesting Tentative Tract Map and / or the recordation of the Final Tract Map as approved by the City Engineer.

28. The Developer shall submit a copy of approved Grading plans on bond paper to the City of Carson – Engineering Division, prior to issuance of grading permits.

29. The Developer shall submit an electronic copy of approved plans (such as, Sewer, Street and/or Storm Drain Improvements, whichever applies), to the City of Carson – Engineering Division, prior to issuance of permit by Engineering Division.

30. Proof of Worker's Compensation and Liability Insurance shall be submitted to the City prior to issuance of permit by Engineering Division.

31. A Construction bond for all work to be done within the public right of way shall be submitted and approved by Engineering Division prior to ~~approval of the Final Map~~ **issuance of building permits for the Project. No offsite work shall take place prior to posting the Construction bond.**

32. A Final Map prepared by, or under the direction of, a pre-1982 Registered Civil Engineer or Licensed Land Surveyor must be processed through the City Engineer prior to being filed with the County Recorder.

33. CC&R's (covenants, conditions, and restrictions) **or REAs (reciprocal easement and maintenance agreements)** to address drainage responsibilities are required.

34. Private easements will not be granted or recorded within areas proposed to be granted, dedicated, or offered for dedication until after the Final Map is filed with the County Recorder. If easements are granted after the date of tentative map approval, a subordination must be executed by the easement holder prior to the filing of the Final Map.

35. Prior to tentative map approval, quitclaim or relocate any easements interfering with building locations to the satisfaction of the City, appropriate agency or entity.

36. Provide suitable turnaround and label the driveways "Private Driveway and Fire Lane" on the Final Map to the satisfaction of the Fire Department.

37. Prior to tentative map approval, a soils report, sewer area study, drainage concept, hydrology study and stormwater quality plan shall be reviewed and approved. Tentative map approval will not be granted until the required soils, sewer, drainage concept, hydrology study and stormwater information have been received and found satisfactory.

38. Comply with mitigation measures recommended in the approved soils, sewer area study, drainage concept, hydrology study and stormwater quality plan.

39. Prior to tentative map approval, the Developer shall submit a sewer area study to the Los Angeles County Department of Public Works (LACDPW) to determine if capacity is adequate in the sewerage system to be used as the outlet for the sewer of this development. If the system is found to have insufficient capacity, the problem must be addressed and resolved to the satisfaction of the L.A. County Sewer Department.

40. The Developer shall install separate sewer laterals to individually serve each building in the development. Installation and dedication of main line sewers may be necessary to meet this requirement.

41. The Developer shall submit drainage/grading plans, prepared by a registered Civil Engineer, to ~~Los Angeles County Department of Public Works (LACDPW)~~ **City of Carson Building & Safety** and obtain approvals to the satisfaction of ~~LACDPW~~ **City of Carson Building & Safety.**

42. The Developer shall comply with applicable LID requirements (Carson Municipal Code Section 5809) and shall include Best Management Practices necessary to control

storm water pollution from construction activities and facility operations to the satisfaction of Building and Safety or as otherwise approved by the City Engineer.

43. A water system maintained by the water purveyor, with appurtenant facilities to serve all buildings in the development, must be provided. The system shall include fire hydrants of the type and location as determined by the Fire Department. The watermains shall be sized to accommodate the total domestic and fire flows.

44. The Developer shall send a print of the development map to the County Sanitation District, to request for annexation. The request for annexation **for the Townhomes must be approved (and annexation granted) prior to issuance of any certificates of occupancy for the Townhomes. The request for annexation for either of the Apartment buildings** must be approved **(and annexation granted)** prior to ~~Final Map approval~~ **issuance of any certificates of occupancy for the respective Apartment Building.**

45. A final guarantee will be required at the time of the filing of the Final Map with the County Recorder/County Clerk's Office.

46. Comply with the City of Carson Green Streets standards.

*Prior to Issuance of Building Permit*

47. Public Street Improvements Plans along Avalon Boulevard and Grave Avenue shall (be): a) include parkways, sidewalks, wheelchair ramps, bike lanes, landscaped medians, streetlights, etc. b) per The Imperial Avalon Specific Plan. c) per the City of Carson PW Standard Drawings. d) submitted to and reviewed by County of Los Angeles, Department of Public Works for approval recommendations to the City Engineer.

48. Final Map shall be approved and recorded, except as otherwise provided in the Development Agreement (No. 23-19).

49. Drainage/Grading plan shall be submitted for approval of the Building and Safety Division. The Developer shall submit a copy of approved Drainage/Grading plans on bond paper to the City of Carson – Engineering Division.

50. The Developer shall submit improvement plans to the Engineering Division showing all the required improvements in the public right of way for review and approval of the City Engineer. A copy of approved conditions of approval shall be attached to the plans when submitted.

51. Off-site improvements (e.g., driveways, sidewalk, parkway drains, trees, curb/gutter, etc.) shown on the grading plans must provide a concurrent submittal to City of Carson Engineering Division. Off-site improvements may be shown on a separate set of street

improvement plans. Prior to issuance of Grading permit, developer shall obtain clearance from City of Carson Engineering Division.

52. Per CMC §9161.4, the Developer shall provide an in-lieu fee in an amount determined by the City Engineer, per CMC §9161.7, to be sufficient to cover the costs of undergrounding all existing overhead utility lines, including telecommunication lines,12 Kilovolts. The cash in- lieu payment shall be deposited in full amount before issuance of Building Permits. At the discretion of the City Engineer, the City may accept an undergrounding cost estimate prepared by Southern California Edison in-lieu of the City's estimate.

*Prior to Certificate of Occupancy*

53. The developer shall ensure the signal at the intersection of Avalon Boulevard and the main Project entry is operational, at the developer's expense, to the satisfaction of the City Engineer.

54. The Applicant shall comply with all requirements from L.A. County Sewer Maintenance Division for Maintenance of new and/or existing sewer main, relating to this development, prior to release of all improvement bonds.

55. The Applicant shall execute and provide to the City Engineer, a written statement from the water purveyor (Calwater) indicating that the water system will be operated by the purveyor and that under normal conditions, the system will meet the requirements for the development and that water service will be provided to each building.

56. Comply with mitigation measures required by the water purveyor.

57. The Applicant shall construct and guarantee the construction of all required drainage infrastructures in accordance with the requirements and recommendations of the hydrology study, subject to the approval of the City Engineer.

58. The Developer shall construct and guarantee the construction of all required drainage infrastructures in accordance with the requirements and recommendations of the hydrology study, subject to the approval of the City Engineer.

59. All new utility lines, servicing the proposed development shall be underground to the satisfaction of the City Engineer.

60. Comply with any additional requirements, if any, as means of mitigating any traffic impacts as identified in the traffic study approved by the City Traffic Engineer.

61. Install a striping and pavement legend per City of Carson PW Standard Drawings.

62. If needed, grant an easement(s) to the City or other appropriate agency or entity to the extent necessary for the construction and maintenance of all infrastructures required pursuant to the project approval and these conditions, and to facilitate ADA-compliant pedestrian and vehicular ingress and egress across driveways or other access points connecting the proposed development to the public right-of-way, or otherwise along the public right-of-way on or adjacent to the proposed development, to the satisfaction of the City Engineer and or appropriate agency or entity.

63. The Developer shall annex the area to the L.A. County Lighting Maintenance District, for the purpose of operating and maintaining the streetlights to be installed **but only for offsite streetlights in the public right of way.** The annexation shall be to the satisfaction of L.A. County and shall be completed prior to the issuance of **final** Certificate**s** of Occupancy. Additional streetlight installation or upgrade to existing streetlights may be required as part of the annexation.

64. Relocate existing conflicting street light poles to the satisfaction of L.A. County Traffic and Lighting Division, the City of the City Engineer and/or appropriate agency or entity.

**PUBLIC WORKS – WATER QUALITY**

*Prior to Issuance of Building Permit*

65. Prior to the issuance of Building Permit the proposed development is subject to the following:

a) Per City of Carson ordinance 5809 developer shall comply with all applicable Low Impact Development (LID) requirements and shall include Best Management Practices necessary to control storm water pollution from construction activities and facility operations to the satisfaction of the City Engineer.

b) Developer shall apply for a Construction Activities Stormwater General Permit from the State Water Resources Control Board.

c) Developer shall provide a copy of an approved SWPPP stamped by **the City and/or the** Los Angeles County Building and Safety Division along with WDID number.

d) Developer shall provide contact information of the Qualified Storm Water Developer (QSD) and/or Qualified SWPPP (Storm Water Pollution Prevention Plan) Developer (QSP) of the site to **Roland Jen** via E-mail **RJen**@Carson.ca.us

e) Developer shall submit digital copies of the LID/NPDES/Grading Plans, hydrology and Hydraulic analysis concurrently to City of Carson, Engineering Services Department and Building & Safety Division. Deliver copy to **Roland Jen** via E-mail **RJen**@Carson.ca.us

f) Developer shall complete, sign and return the Stormwater Planning Program LID Plan Checklist form and return to City of Carson Engineering Services Division.

*Prior to Issuance of Certificate of Occupancy*

66. Prior to the issuance of Certificate of Occupancy the proposed development is subject to the following:

a) For any structural and/or treatment control device installed. Developer shall record a maintenance covenant pursuant to Section 106.4.3 of the County of Los Angeles Building Code and title 12, Chapter 12.80 of the Los Angeles County Code relating to the control of pollutants carried by storm water runoff. In addition, an exhibit shall be attached to identify the location and maintenance information for any structural and/or treatment control device installed.

b) Developer shall complete and submit digital BMP Reporting Template Spreadsheet to the City Public Works Department.

c) Covenant shall be reviewed and approved by the City Engineer prior to recordation with the Los Angeles County Registers Recorder/County Clerk.

d) RECORDATION is the responsibility of the Developer. Provide a copy of the recorded covenant agreement to City Engineer.

e) Inspection will be conducted once a year after all Post Construction Best Management Practices (BMP) are constructed.

f) Developer shall provide an approved Notice of Termination (NOT) by the State Water Resources Control Board.

**FIRE DEPARTMENT**

67. The proposed development for the Project shall obtain approval and comply with all Los Angeles County Fire Department requirements.

*Final Map*

68. Submit the Final Map for review and approval prior to recordation. Submittals are to be made at epicla.lacounty.gov.

69. Label the driveway "Private Driveway and Fire Lane" on the Final Map and clearly depict the required Fire Department width as approved at the tentative map review.

70. Prior to building permit issuance, verification for compliance will be performed during the fire prevention engineering plan check unit architectural plan review.

**LOS ANGELES COUNTY DEPARTMENT PUBLIC WORKS**

*Drainage*

71. Comply with the approved hydrology study, or the latest revision, to the satisfaction of **City of Carson Building & Safety.** ~~Public Works~~

72. Comply with the City's water quality requirements.

*Geology and Soils*

73. The final map must be approved by the **City of Carson Building&Safety's designated geotechnical expert** ~~Geotechnical and Materials Engineering Division (GMED)~~ to assure that all geotechnical requirements have been properly depicted.

Grading

74. Submit a grading plan **to the City of Carson Building&Safety** for approval. Also, acknowledgment and/or approval from all easement holders may be required.

75. Prior to approval of the grading plan, provide approval of the latest hydrology study ~~by~~ **to** the City **of Carson Building & Safety.**

76. Prior to approval of the grading plan, the subject grading plan must also be approved by Public Works, Geotechnical and Materials Engineering Division (GMED) or the City's Geotechnical Engineer.

77. **In order to ensure access to the Townhomes from Avalon Blvd through the Apartment lots, the rough grading of the site shall be completed for the entire Property. Notwithstanding the foregoing, the inspection and signoff of individual rough-graded pads for the Townhomes and/or either Apartment lot, respectively, can be obtained for individual rough-graded pads during the rough-grading effort.** Prior to approval of the grading plan, provide approval of any permits and/or letter of non-jurisdiction from all State and Federal Agencies as applicable. These agencies may include; the State of California Regional Water Quality Control Board, the State of California Department of Fish and Wildlife, the State of California Department of Conservation, the California Geologic Energy Management, and the Army Corps of Engineers.

*Street*

78. Dedicate an additional 5 feet of street right of way on Grace Avenue (30' from the street centerline).

79. Construct road improvements along the property frontage on Grace Avenue to include standard pavement, base, pavement transition, curb, gutter, and sidewalks. Sidewalks are to be constructed next to the property line. Relocate any affected utilities.

80. Reconstruct the cul-de-sac on Grace Avenue with a minimum radius of 32 feet.

81. Reconstruct the existing driveway on Avalon Boulevard to comply with American with Disabilities Act standards. The shared driveway needs to be reconstructed as two separate driveways. A 1' minimum clearance is required between the driveways top of "x."

82. Repair or replace all damaged sidewalk panels.

83. Repair or replace any improvements damaged during construction.

84. Plant street trees along the property frontage on Grace Avenue and Avalon Boulevard and provide a privately maintained irrigation system. Existing trees in dedicated or to be dedicated right of way shall be removed and replaced if not acceptable as street trees.

85. All drainage improvements within public right of way are to be privately maintained. Execute a covenant for private maintenance of curb/parkway drains, if any.

86. Underground all existing service lines and distribution lines that are less than 50 KV and new utility lines to the satisfaction of Southern California Edison.

87. Prior to **any** ~~final~~ **certificates of occupancy** ~~map approval,~~ enter into an agreement with the **local-**franchised cable TV operator (if an area is served) to permit the installation of cable in a common utility trench or provide documentation that steps to provide cable TV to the proposed subdivision have been initiated.

88. Comply with the City's road conditions.

89. Comply with the street lighting conditions as stipulated in the enclosed memorandum dated February 1, 2022, from Los Angeles County Public Works, Traffic Safety and Mobility Division (Street Lighting Section), and/or any of the City's street lighting requirements. **Per the memorandum, the County Lighting Districts cannot assume responsibility for streetlights located within gated communities or on roadways designated as a private or private-future street.**

*Sewer*

90. The approved sewer area study for this proposed land division remains valid for two years from the date of approval. After this period, the applicant shall request the City to re-validate the existing approved sewer area study. Any modifications to the approved tentative map may invalidate this sewer area study. If warranted by Public Works or the City, an approved update of the area study shall be required.

*Water*

91. The Developer shall comply with the requirements as stipulated in the Will Serve letter from California Water Service.

*Subdivision*

92. Provide addressing information in Microsoft Excel format to the satisfaction of the City Engineer.

93. Reserve reciprocal easements for drainage, ingress/egress, sewer, water, utilities, right to grade, and maintenance purposes, etc., in documents, over the common private driveways.

94. ~~Remove existing buildings prior to final map approval.~~ Demolition permits and final sign-off from the building inspector are required from the local Building and Safety office.

95. A final guarantee will be required at the time of the filing of the final map with the Registrar-Recorder/County Clerk's office.

96. Within 30 days of the approval date of this land use entitlement or at the time of the first plan check submittal, the applicant shall deposit the sum of $5,000 with Los Angeles County Public Works to defray the cost of verifying conditions of approval for the purpose of issuing final map clearances.

*Street Light Requirements*

97. The ~~project area~~ **installation of new street lights in the public right of way** will ~~be~~ require~~d to~~ **annexation into** ~~be annexed to~~ the County Lighting Maintenance District serving the City of Carson. Therefore, submit a street lighting plan showing existing **offsite** streetlight**s** **in the right of way** for the annexation process prior to **issuance of any** certificate**s** of occupancy.

98. Upon submittal of street lighting plans(s) **(offsites** ~~subdivision~~ only), the applicant shall comply with conditions of annexation in order for the light districts to pay for the future operation and maintenance of the streetlights. The annexation and the levy of assessment require the approval of the Board of Supervisors prior to Public Works approving street lighting plans. It is the sole responsibility of the owner/developer of the project to have all street lighting plans approved prior to ~~the map recordation~~ **the issuance of any certificates of occupancy.** The required street lighting improvements shall be the sole responsibility of the owner/developer of the project and the installation must be accepted per approved plans. If phasing of the project is approved, the required street lighting improvements shall be the sole responsibility of the owner/developer of the project and will be made a condition of approval to be in place for each phase.

*Conditions of Annexation for County Lighting Maintenance District*

99. Provide business/property owners name, mailing address, site address, Accessor Parcel Number, and Parcel Boundaries in Auto CADD format to be developed to Street Lighting Section **for any new street lights in the public right of way prior to issuance of any certificates of occupancy.**

100. Submit map of the proposed project including any roadways condition for streetlights to Street Lighting Section **for any new street lights in the public right of way prior to issuance of any certificates of occupancy.** Contact Street Lighting Section for map requirements and/or questions at (626) 300-4726.

*Conditions of Acceptance for Street Light Transfer of Billing*

101. ~~The area~~ **Prior to issuance of any certificates of occupancy, any new offsite street lights** must be annexed into the lighting district and all streetlight**s** in the project, or the approved phase of the project, must be constructed according to **City** ~~Public Works~~ approved plans. The contractor shall submit one complete set of "as-built" plans. The lighting district can assume the responsibility for the operation and maintenance of the **offsite** streetlights by July 1st of any given year, proved the above conditions are met, all streetlight**s** in the project, or approved project phase, have been constructed per **City** ~~Public Works~~ approved plan and energized and the owner/developer has requested a transfer of billing **for offsite street lights** at least by January 1st of the previous year. The transfer of billing could be delayed one or more years if the above conditions are not met.

*Recycled Water and Purple Pipe Extension*

102. ~~The Developer will provide recycled water purple pipe on site and will tie into any future purple pipe infrastructure. Prior to issuance of any Project grading or building permits, Developer shall enter into an agreement with the City and West Basin Municipal Water District to extend the existing purple pipe infrastructure from the intersection of Lenardo Drive and Avalon Boulevard to Avalon Boulevard and Carson Street. If an agreement cannot be reached, Developer will tie into purple pipe infrastructure when it becomes available.~~ **Intentionally Omitted.**

103. ***Interim Development Impact Fee:*** In accordance with Article XI (Interim Development Impact Fee Program) of the Carson Municipal Code ("CMC"), the applicant, property owner, and/or successor to whom this project approval is assigned ("Developer") shall be responsible for payment of one-time interim development impact fees ("IDIF") at the applicable rate detailed below for each unit of residential development constructed for the project. If the project increases or decreases in regards to the number of units constructed, the total IDIF amount will be adjusted accordingly at the applicable rate.

Per CMC 11504, the IDIF shall be paid prior to the issuance of a certificate of occupancy for the specific Townhome or Apartment building or up to twelve (12) months following the issuance of the building permit for the specific Townhome or Apartment building, whichever occurs first, and the applicable IDIF rate (detailed below) shall be that in effect at the time of such payment, unless the timing or requirements of payment is modified by applicable State Law. No certificate of occupancy shall be issued prior to the full payment of the required IDIF amount, which payment shall be made in one lump sum installment. IDIF amounts/rates are subject to adjustment every July 1st based on State of California Construction Cost Index (Prior March to Current March Adjustment), per CMC Section 11500.

IDIF amounts/rates for residential development have been set at $16,918.01 per unit (1 bedroom or studio) and $21,147.52 (All Other) per unit for Fiscal Year 2025-26, effective July 1, 2025, through June 30, 2026. Affordable Housing Units are exempted from IDIF. Based on these rates, the Developer would be responsible for a total payment of IDIF for the proposed project in an amount calculated as follows: the applicable rate per unit multiplied by 1,115, for 1,115 Residential Units, subject to any applicable fee offsets to which Developer might be entitled under Carson Municipal Code Sections 11800-11804.

However, if the IDIF for the project is not paid in 2025-26 fiscal year (i.e., by June 30, 2026), a new IDIF rate/amount will apply for the period of July 1, 2026, through June 30, 2027, based on the IDIF rate for Fiscal Year 2026-27, and so on for subsequent fiscal year(s). The fee for Fiscal Year 2026-2027 IDIF has not yet been determined.

To understand the requirements in more detail, please visit the City's IDIF webpage at: https://ci.carson.ca.us/communitydevelopment/IDIFProgram.aspx and/or contact James Nguyen at jnguyen@carsonca.gov or 310-952-1700 ext. 1310.

***Notice of Imposition of Interim Development Impact Fees; Right to Protest***

Pursuant to CMC Section 11503, Developer is hereby notified of the IDIF imposed on the project, as described and in the amount stated above. In accordance with Government Code Section 66020, Developer may protest the imposition of the IDIF on the project by complying with the requirements set forth in CMC 11900. Any such protest shall be filed at the time of the approval or conditional approval of a development, as that phrase is defined in CMC 11901(A).

If you have any questions or comments regarding this notice, please contact James Nguyen at jnguyen@carsonca.gov or (310) 952-1700 ext. 1310.

**EXHIBIT C TO CITY COUNCIL ORDINANCE NO. 22-2221 – CONDITIONS OF APPROVAL (SPECIFIC PLAN NO. 21-19)**

These "Conditions of Approval" shall govern the Imperial Avalon Specific Plan ("Specific Plan"), located at 21207 Avalon Boulevard in the City of Carson ("Project Site"). The "Project" consists of a mixed use project including 1,115 residential dwelling units, 10,000 square feet of restaurant area, and a 22,859 square foot of publicly accessible but privately maintained open space area within the Imperial Avalon Specific Plan. The Project is proposed by the "Applicant" which currently **(as of the date of Planning Commission Resolution No. 22-244)** consists of Imperial Avalon, LLC which term shall include the successors and assigns of the Applicant (aka, the "Developer").

**GENERAL CONDITIONS**

1. The Applicant shall sign an Affidavit of Acceptance form and submit the document to the Planning Division within 30 days of receipt of the City Council Resolution approving the Imperial Avalon Specific Plan.

2. The adopted Ordinance approving the Imperial Avalon Specific Plan, including the Conditions of Approval contained herein, and the signed Affidavit of Acceptance, shall be copied in their entirety and placed directly onto a separate plan sheet behind the cover sheet of the development plans prior to Building and Safety plan check submittal. Said copies shall be included in all development plan submittals, including any revisions and the final working drawings.

3. These Conditions of Approval shall be subject to the terms and conditions of the Specific Plan, Final Environmental Impact Report (FEIR), Mitigation Monitoring and Reporting Program (MMRP), and Development Agreement (DA). In the event of a conflict between these Conditions of Approval and the Development Agreement the Development Agreement shall control.

4. The Applicant shall comply with all City, county, state, and federal regulations applicable to the Project.

5. The Applicant shall comply with all Mitigation Measures, Project Design Features, and Project Characteristics as described in the Final Environmental Impact Report and MMRP.

6. The Applicant shall make any necessary site plan and design revisions to the site plan and elevations approved by the Planning Commission or City Council in order to comply with all the Conditions of Approval and applicable Specific Plan provisions.

7. The applicant shall update the Specific Plan document, if deemed necessary by the Community Development Director, consistent with all approvals and revisions approved by the City Council.

8. City Approvals. All approvals by City, with respect to the Project and/or the Conditions of Approval set forth herein, unless otherwise specified, shall be by the department head of the department or agency requiring the applicable condition. All agreements, covenants, easements, deposits and other documents required herein where City is a party shall be in a form approved by the City Attorney. The Applicant shall pay the cost for review and approval of such agreements and deposit necessary funds pursuant to the January 19, 2021 Reimbursement Agreement.

9. Reimbursement Agreement. A trust deposit account shall be established and maintained pursuant to the Reimbursement Agreement, dated January 19, 2021.

10. Indemnification. The Applicant, and its tenant(s), for themselves and their successors in interest ("Indemnitors"), agree to defend, indemnify and hold harmless the City of Carson, its agents, officers and employees, and each of them ("Indemnitees") as set forth in the DA from and against any and all claims, liabilities, damages, losses, costs, fees, expenses, penalties, errors, omissions, forfeitures, actions, and proceedings(collectively, "Claims") against Indemnitees with respect to the Project entitlements or approvals that are the subject of these Conditions of Approval, and any Claims against Indemnitees which are in any way related to Indemnitees' review of or decision upon the Project that is the subject of these Conditions of Approval (including, without limitation, any Claims related to any finding, determination, or claim of exemption made by Indemnitees pursuant to the requirements of the California Environmental Quality Act or other local or State Agencies, and any Claims against Indemnitees which are in any way related to any damage or harm to people or property, real or personal, arising from Indemnitors' construction or operations of the Project, including site improvements and other associated improvements. Or any of the Project entitlements or other approvals that are the subject of Conditions of the Approvals for the Specific Plan, Site Plan and Design Review and Tentative Tract Map. The City will promptly notify Indemnitors of any such claim, action or proceeding against Indemnitees, and, at the option of the City, Indemnitors shall either undertake the defense of the matter or pay Indemnitees associated legal costs or shall advance funds assessed by the City to pay for the defense of the matter by the City Attorney. In the event the City opts for Indemnitors to undertake defense of the matter, the City will cooperate reasonably in the defense, but retains the right to settle or abandon the matter without Indemnitors' consent. Indemnitors shall provide a deposit to the City in the amount of 100% of the City's estimate, in its sole and absolute discretion, of the cost of litigation / Claims asserted, including the cost of any award of attorneys' fees, and shall make additional deposits as requested by the City to keep the deposit at such level. If Indemnitors fail to provide or maintain the deposit, Indemnitees may abandon the action and Indemnitors shall pay all costs resulting therefrom and Indemnitees shall have no liability to Indemnitors.

**SPECIAL CONDITIONS**

11. Vehicular Gates. The location and design of all proposed vehicular gates shall be reviewed and approved by the City's traffic engineer and the Los Angeles County Fire Department.

12. Pedestrian Gates. The location, design and access control methods for all proposed pedestrian gates, including access gates for the pedestrian bridge, shall be reviewed and approved by the Director of Community Development prior to the issuance of any building permit.