



El Segundo Downtown Specific Plan Update Draft Environmental Impact Report Appendices

State Clearinghouse No. 2023010196

Prepared for:

City of El Segundo
350 Main Street
El Segundo, California 90245

Prepared by:

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633 W. 5th Street, 26th Floor
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February 2, 2024

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APPENDIX A.1: NOTICE OF PREPARATION



NOTICE OF PREPARATION

OF AN ENVIRONMENTAL IMPACT REPORT AND PUBLIC SCOPING MEETING

City Project No.:	Environmental Assessment No. EA 1311, General Plan Amendment No. GPA 21-01, Zone Change No. ZC 21-01, and Specific Plan Amendment No. SPA 21-01
Project Name:	El Segundo Downtown Specific Plan Update
Project Address:	Downtown El Segundo (see Figures 1 and 2 for project location and project area boundary)
Public Comment Period:	January 12, 2023 through February 13, 2023
Public Scoping Meeting:	February 2, 2023 from 5:30 PM to 7:00 PM
Public Scoping Meeting Location:	City Hall Council Chambers 350 Main Street, El Segundo 90245

Pursuant to Section 21165 of the California Public Resources Code and Section 15050 of the California Environmental Quality Act (CEQA) Guidelines, the City of El Segundo (City) is the Lead Agency for the preparation of a Programmatic Environmental Impact Report (PEIR) for the proposed El Segundo Downtown Specific Plan Update Project (Specific Plan/project). In accordance with CEQA Guidelines Section 15082, the City has prepared this Notice of Preparation (NOP) to provide responsible and trustee agencies, the Office of Planning and Research, and the County Clerk with sufficient information describing the project and its potential environmental effects to enable the responsible agencies to make a meaningful response to this NOP.

The City is requesting your agency's specific and detailed input regarding the scope and content of the environmental information related to your agency's statutory responsibility that must be included in the Draft PEIR. Pursuant to CEQA Guidelines Section 15083, this NOP also serves to facilitate consultation with any persons or organizations that may be concerned with the environmental effects of the Project. Additionally, this NOP serves as a notice for the public Scoping Meeting, which is held to expedite and facilitate the consultation process. The City of El Segundo has reviewed the above project and has prepared an Initial Study in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15070.

Project Location. The Specific Plan Update area (project area) is in Downtown El Segundo, in the northwest quadrant of the City of El Segundo. The project area is approximately 43.8 acres in size. The project area is irregular in shape with portions extending to Eucalyptus Drive to the east, El Segundo Boulevard to the south, Concord Street to the west, and Mariposa Avenue to the north. The project area is currently developed with a wide range of commercial, residential, and public uses. The project area location is shown in **Figure 1, Regional Location** and **Figure 2, Specific Plan Update Project Boundary**.

Project Description Overview. The project is a revision to the existing El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The project would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels,

and include mobility enhancements. The project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

The Specific Plan Update proposes to expand the boundaries of the Downtown Specific Plan area to include eight parcels located on Standard Street to the north and south of Grand Avenue. The project proposes amendments to the Land Use Element of the City’s General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The project would also amend the City’s zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The existing and proposed land use and zoning are shown in **Figures 3** through **6**.

The project is proposed to accommodate future market demand in the project area. Potential demand within the project area (through 2040) is projected as follows (rounded):

PROPOSED LAND USE CHANGE IN DOWNTOWN EL SEGUNDO	
	Proposed
<i>Retail and Restaurant</i>	130,000 square feet
<i>Office</i>	200,000 square feet
<i>Medical Office</i>	24,000 square feet
<i>Residential Units</i>	300 units

In addition to land use and zoning changes, the project would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would create potential changes to the number of travel lanes on those streets. The project would eliminate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue; proposes the potential closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue to create a permanent pedestrian only street for outdoor dining and gathering; and include buffered bicycle lanes on Main Street and Grand Avenue. The project would include pedestrian and transit improvements in the project area including widened sidewalks. Transit improvements could include bus stop enhancements and potentially new and/or relocated bus stops. Widened sidewalks would also provide expanded outdoor seating and dining areas for area restaurants.

The project would include modifications to parking standards and strategies and alternatives for on-street parking and two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond and Franklin. Lastly, the 2000 Specific Plan area was previously divided into six districts and the Specific Plan update would adjust the Specific Plan area into four distinct districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts. **Figure 7, Proposed Specific Plan Districts**, shows the four districts.

Potential Environmental Effects of the Project. The project could have potentially significant environmental impacts to the following environmental topic areas: Aesthetics; Air Quality; Cultural Resources; Energy; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Land Use and Planning; Noise; Paleontology; Population and Housing; Public Services and Recreation; Transportation; Tribal Cultural Resources; and Utilities/Service Systems.

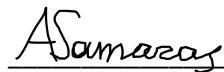
Because of the existing condition of the project area, which is fully developed and located in an urbanized setting, implementation of the Specific Plan is not expected to result in any significant impacts to: Agriculture and Forestry Resources; Biological Resources; Geology/Soils; Mineral Resources; and Wildfire. The City is proposing to “scope out” these topics from the Draft PEIR without further study, as summarized in this NOP’s Appendix A, Initial Study.

This NOP, including Appendix A, is available for electronic download on the City’s website at: <https://www.elsegundo.org/downtownupdate>.

Public Scoping Meeting. The project Scoping Meeting will be held in person at the location noted below. The Scoping Meeting will involve a presentation about the proposed project and the environmental review process and schedule. The purpose of the meeting is to facilitate the receipt of written comments about the scope and content of the environmental analysis to be addressed in the Draft PEIR. The Scoping Meeting is for information-gathering, is not a public hearing, and no public testimony will be taken. No decisions about the Project will be made at the Scoping Meeting. A separate public hearing for entitlement requests will be scheduled after the completion of the Draft PEIR. The date, time, and website of the project’s Scoping Meeting are as follows:

Date and Time: February 2, 2023 from 5:30 PM to 7:00 PM
Scoping Meeting Location: City Hall Council Chambers
350 Main Street, El Segundo 90245

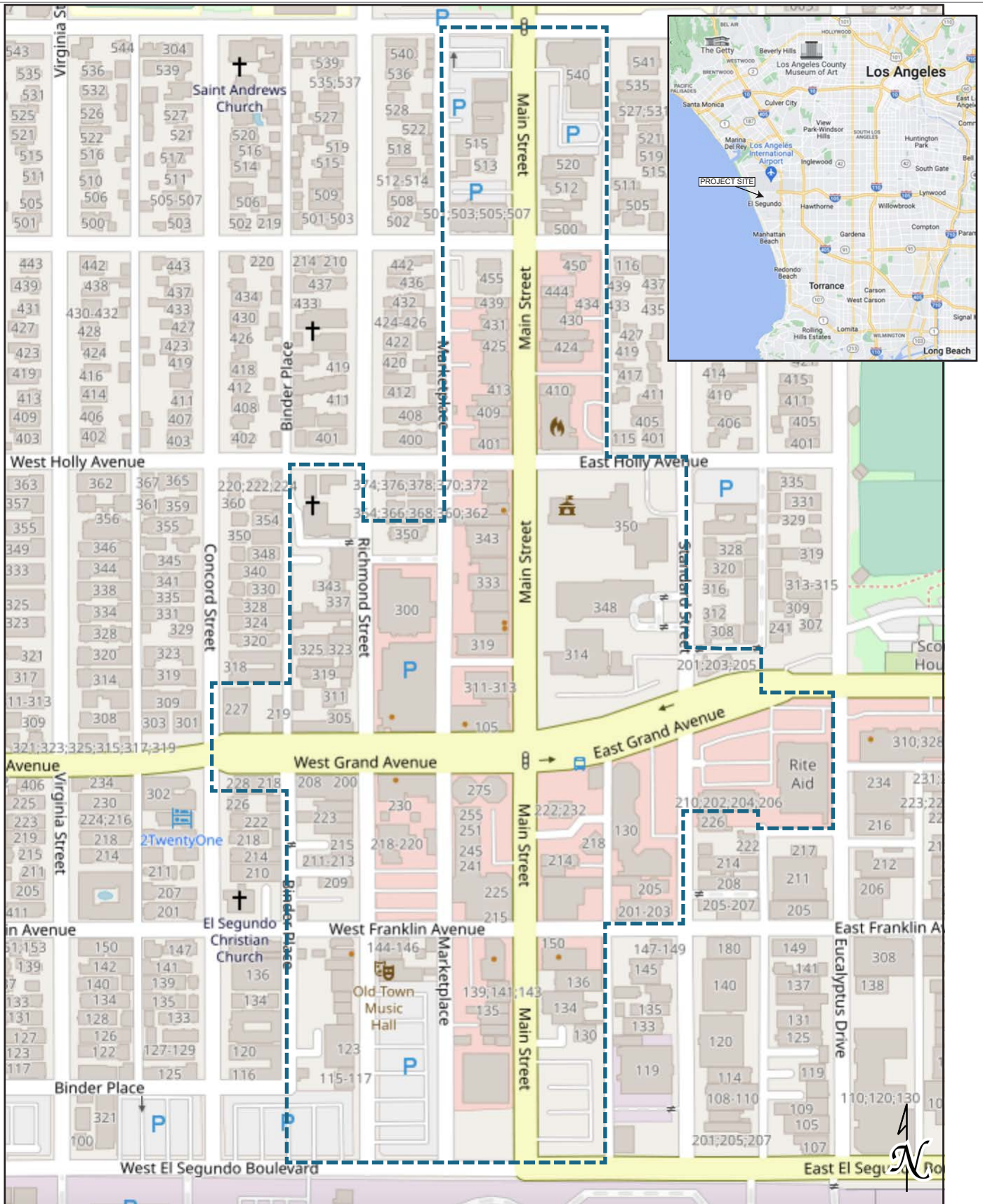
Submitting Comments. The City will consider all written comments regarding the potential environmental effects of the project received during the NOP public review period. All written comments received will be reviewed and considered by the City as part of the environmental analysis of the proposed project and will become a part of the public record for the Draft PEIR. Written comments will be accepted during the Scoping Meeting, via email, and/or via mail, and must be received by the City by **5:00 P.M., February 13, 2023**. Please direct your written comments to Paul Samaras, City of El Segundo, Community Development Department, 350 Main Street, El Segundo, CA 90245, or email psamaras@elsegundo.org.



Paul Samaras, AICP
Principal Planner

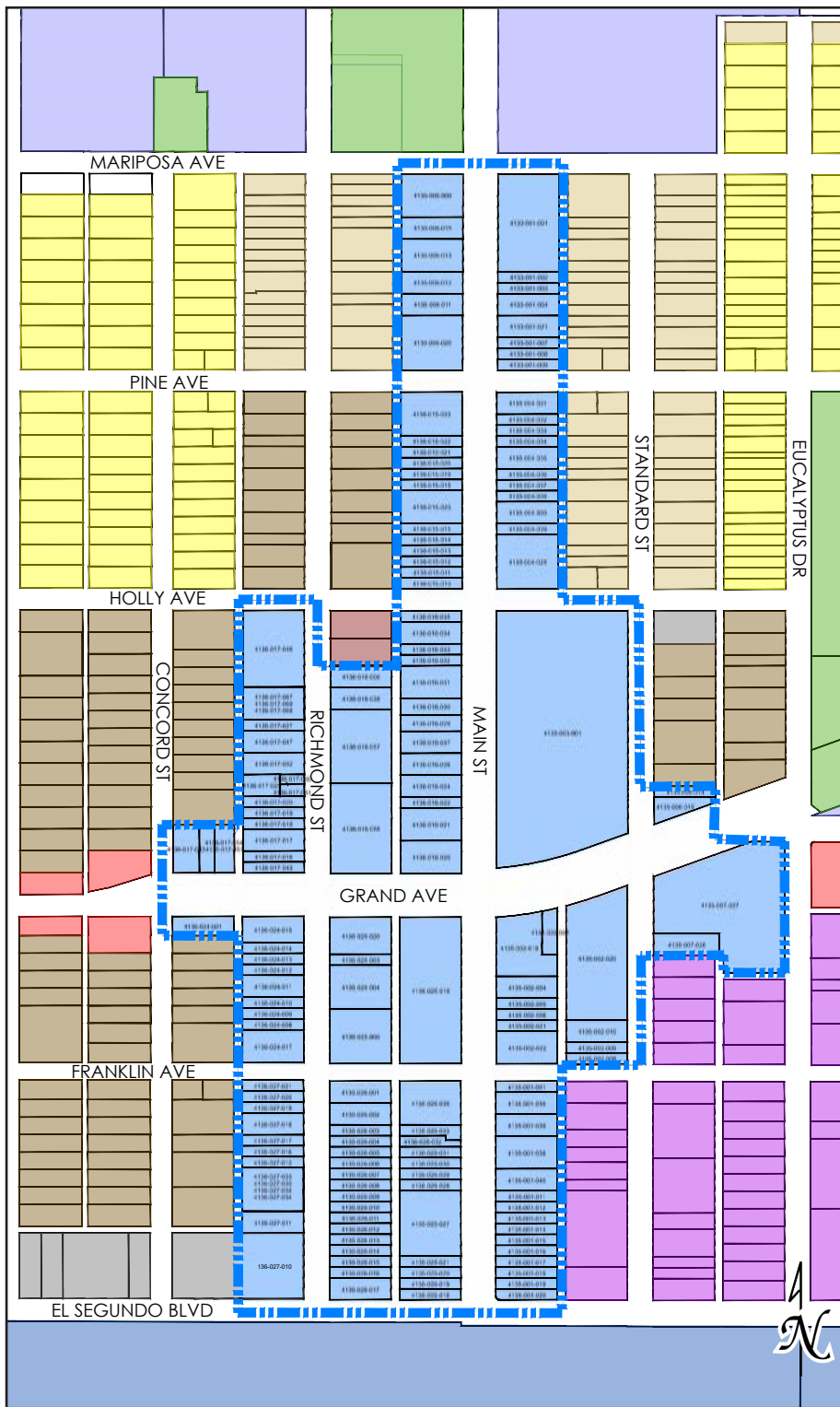
1/6/2023

Date



 Project Area
 Source: OpenStreetMaps and Google Maps, December 2022.

Figure 1
 Regional Location Map



LEGEND

- Project Area Boundary
- Single-Family Residential
- Two-Family Residential
- Multi-Family Residential
- Smoky Hollow
- Parks
- Downtown Specific Plan
- General Commercial
- Downtown Commercial
- Parking
- Heavy Industrial
- Public Facilities

Source: RRM Design Group, August 2022.

Figure 2
Specific Plan Update Project Boundary



LEGEND

Project Area Boundary	Single-Family Residential	Downtown Commercial
Downtown Specific Plan	Two-Family Residential	General Commercial
Multi-Family Residential	Smoky Hollow	Public Facilities
Parks	Heavy Industrial	Parking

Source: RRM Design Group, August 2022.

Figure 3
Existing Land Use Designations



LEGEND

Project Area Boundary	Single-Family Residential	Downtown Commercial
Downtown Specific Plan	Two-Family Residential	General Commercial
	Multi-Family Residential	Public Facilities
	Smoky Hollow	Heavy Industrial
	Parks	Parking

Source: RRM Design Group, August 2022.

Figure 4
Proposed Land Use Designations



LEGEND

- | | | |
|------------------------------|---------------------------------|-------------------------------|
| Project Area Boundary | Single-Family Residential (R-1) | Downtown Commercial (C-RS) |
| Downtown Specific Plan (DSP) | Two-Family Residential (R-2) | Neighborhood Commercial (C-2) |
| | Multi-Family Residential (R-3) | Public Facilities (P-F) |
| | Smoky Hollow West (SHW) | Heavy Manufacturing (M-2) |
| | Open Space (O-S) | Parking (P) |

Source: RRM Design Group, August 2022.

Figure 5
Existing Zoning



Source: RRM Design Group, August 2022.

Figure 6
Proposed Zoning

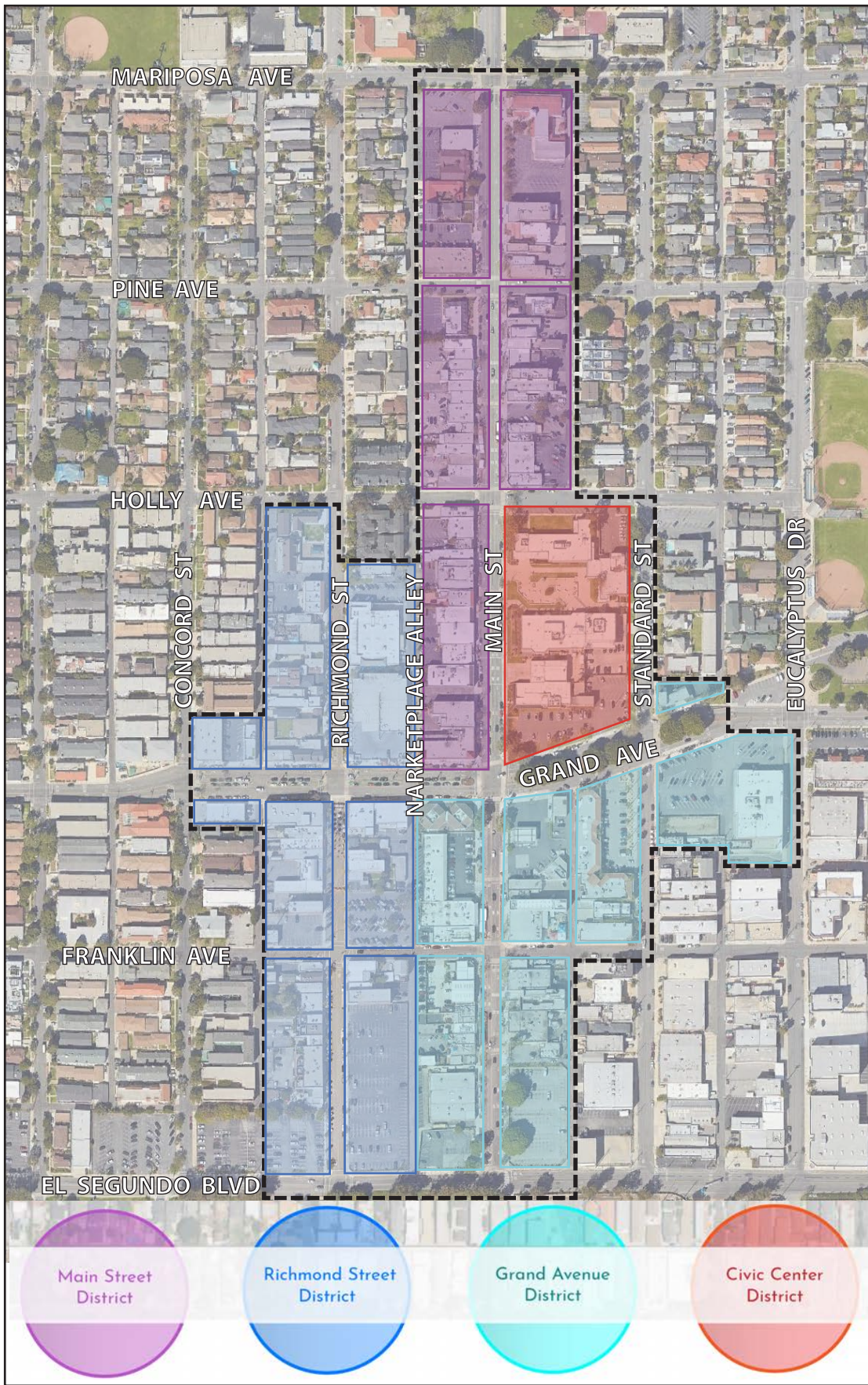


Figure 7
Proposed Specific Plan Districts

APPENDIX A.2: INITIAL STUDY



**CITY OF EL SEGUNDO
DOWNTOWN SPECIFIC PLAN
UPDATE
INITIAL STUDY**

January 2023

Community Development Department
350 Main Street
El Segundo, CA 90245 (310) 524-2380

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I. INTRODUCTION

A. INTRODUCTION AND REGULATORY GUIDANCE

An Initial Study (IS) is conducted by a lead agency to determine if a project may have a significant effect on the environment (CEQA Guidelines Section 15063[a]). If there is substantial evidence that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) must be prepared in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15064(a). However, if the lead agency determines the impacts are, or can be reduced to, less than significant, a Mitigated Negative Declaration (MND) or Negative Declaration (ND) may be prepared instead of an EIR (CEQA Guidelines Section 15070[b]). Pursuant to CEQA Guidelines Section 15070, a MND or ND is appropriate when the project's Initial Study identifies potentially significant effects, but:

- a. Revisions to the project plan were made that would avoid or reduce the effects to a point where clearly no significant effects would occur; and
- b. There is no substantial evidence that the project, as revised, may have a significant effect on the environment.

This IS prepared by the City of El Segundo (including an attached Environmental Checklist form) concludes that the proposed project may have a significant environmental effect and the preparation of a Programmatic Environmental Impact Report (PEIR) is required. This IS was prepared in accordance with Section 15070 of the State California Environmental Quality Act (CEQA) Guidelines.

B. LEAD AGENCY

The lead agency is the public agency with primary responsibility over a proposed project. In accordance with CEQA Guidelines Section 15051(b)(1), "the lead agency will normally be the agency with general governmental powers." The project would be approved and carried out by the City of El Segundo. Therefore, based on the criteria described above, the City of El Segundo is the lead agency for the proposed project.

C. PURPOSE AND DOCUMENT ORGANIZATION

The City is preparing a PEIR for the proposed El Segundo Downtown Specific Plan Update Project (Specific Plan project). The purpose of this IS is to evaluate the potential environmental effects and the document is divided into the following sections:

I. INTRODUCTION

This section provides an introduction and describes the purpose and organization of this document.

II. INITIAL STUDY CHECKLIST

This section includes the project background and a detailed description of the project. This section describes the environmental setting for each of the environmental subject areas; evaluates a range of impacts classified as “no impact,” “less than significant impact,” “less than significant impact with mitigation incorporated,” or “potentially significant impact” in response to the environmental checklist and provides an environmental determination for the project.

III. REFERENCES

This section identifies resources used in the preparation of the IS.

A. PROJECT DESCRIPTION**1. Project Title:**

El Segundo Downtown Specific Plan Update (Specific Plan Update)

2. Lead Agency Name and Address:

City of El Segundo
Community Development Department
350 Main Street
El Segundo, CA 90245

3. Lead Agency Contact Person and Phone Number:

Paul Samaras, AICP, Principal Planner, (310) 524-2340

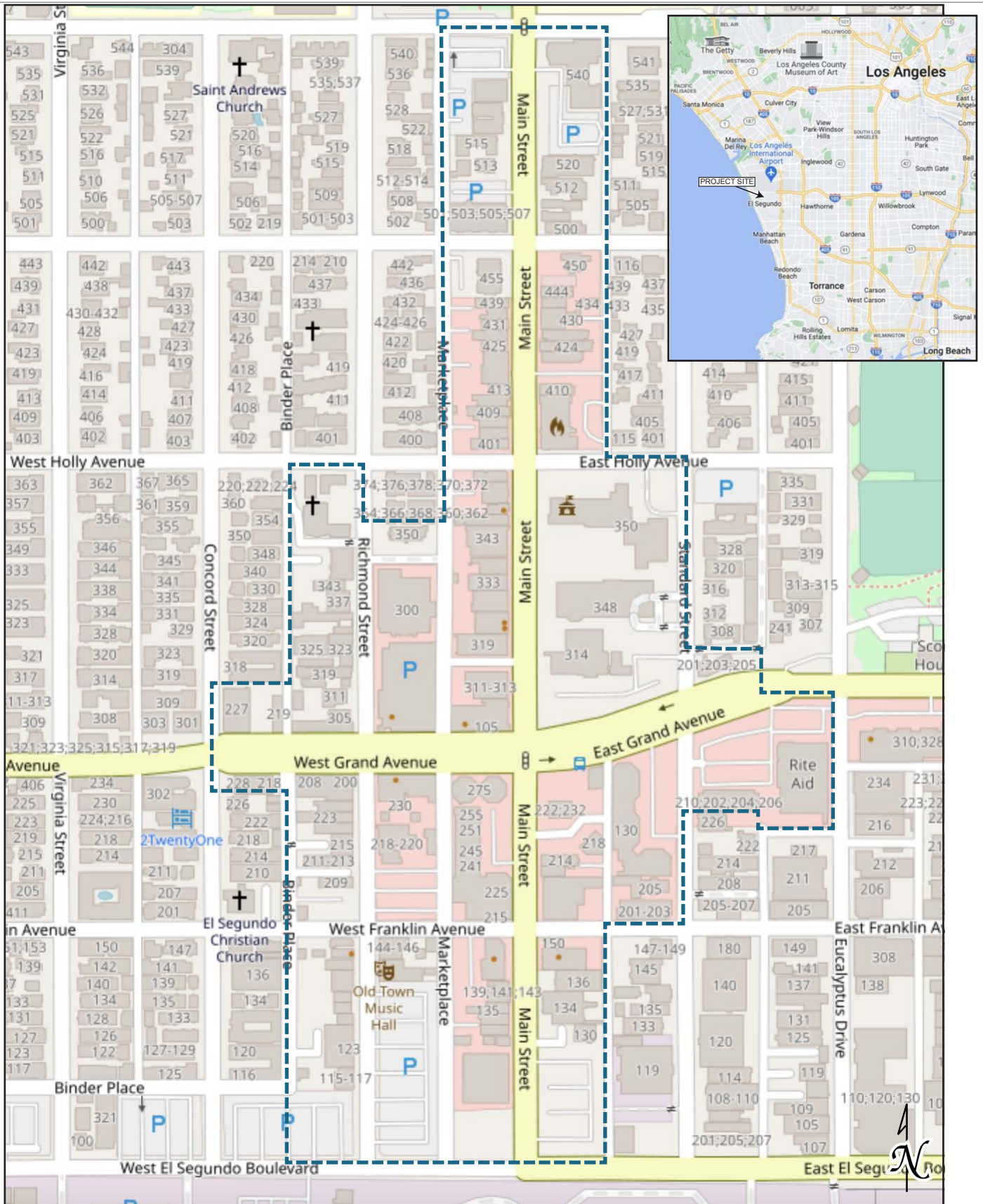
4. Project Location:

El Segundo, California
County of Los Angeles

The El Segundo Downtown Specific Plan Update area (project area) is in Downtown El Segundo, in the northwest quadrant of the City of El Segundo. The Specific Plan area is approximately 43.8 acres in size. The project area is irregular in shape with portions extending to Eucalyptus Drive to the east, El Segundo Boulevard to the south, Concord Street to the west, and Mariposa Avenue to the north.

The Downtown remains a small, distinct area within El Segundo and most of the Specific Plan area includes a range of neighborhood serving commercial uses including retail, restaurants, offices, and banks; and there are some existing civic uses and residential units. Existing development within the Specific Plan area ranges from one- to three-story buildings, with many buildings located along or near the front property line at one to two-story heights and a few three-story buildings. The Specific Plan area is generally gently sloping with some steeper topography along portions Main Street and the Marketplace Alley.

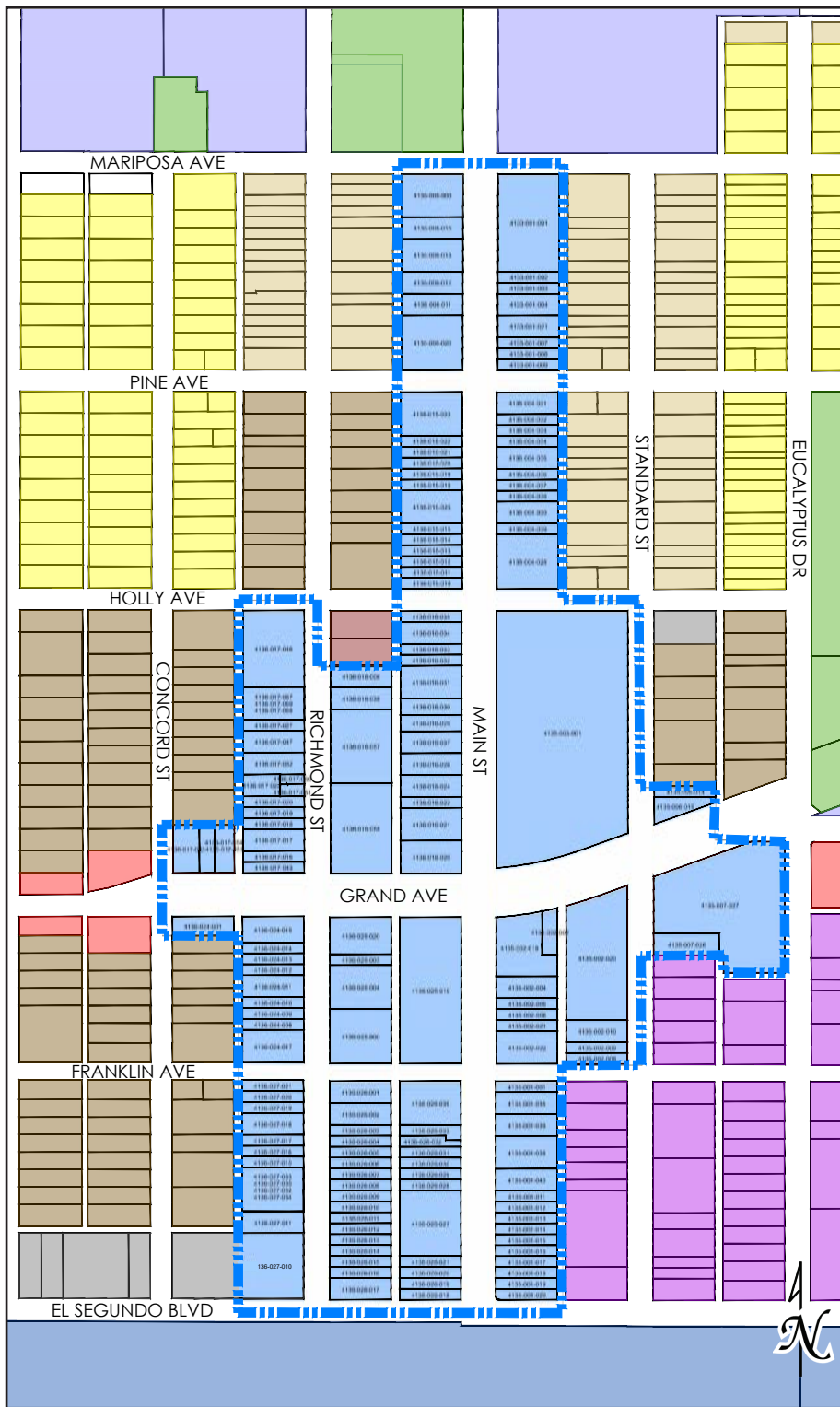
The Specific Plan area is divided by two principal streets running in a north-south orientation, Main Street and Richmond Street, and contains portions of lesser traveled Standard Street and Concord Street. Two major streets cross in an east-west orientation, Grand Avenue and El Segundo Boulevard, as do sections of four smaller streets: Franklin Avenue, Holly Avenue, Pine Avenue, and Mariposa Avenue. Main Street, Grand Avenue, and El Segundo Boulevard each connect to major, regional arterials or freeways. Main Street runs between El Segundo Boulevard and Imperial Highway, which borders Los Angeles International Airport. El Segundo Boulevard, on the southern boundary of the Specific Plan area, connects to Pacific Coast Highway and the I-405 Freeway. Grand Avenue links to Pacific Coast Highway to the east and the coastline to the west. The project area location is shown in **Figure 1, Regional Location** and **Figure 2, Specific Plan Update Project Boundary**.



 Project Area

Source: OpenStreetMaps and Google Maps, December 2022.

Figure 1
Regional Location Map



LEGEND

- Project Area Boundary
- Single-Family Residential
- Two-Family Residential
- Multi-Family Residential
- Smoky Hollow
- Parks
- Downtown Specific Plan
- General Commercial
- Public Facilities
- Heavy Industrial
- Parking
- Downtown Commercial

Source: RRM Design Group, August 2022.

Figure 2
Specific Plan Update Project Boundary

5. Applicant's Name and Address:

City of El Segundo
Community Development Department
350 Main Street
El Segundo, CA 90245

6. General Plan Land Use Designation:

The El Segundo General Plan provides for a range of land use designations/zones in the City. The Specific Plan Update proposes to expand the boundaries of the Downtown Specific Plan area to include eight parcels located on Standard Street to the north and south of Grand Avenue. The eight parcels would require amendments to the Land Use Element of the City's General Plan to change the land use designation on the eight parcels from Downtown Commercial to Downtown Specific Plan. The existing and proposed land uses are shown in **Figures 3 and 4**.

7. Zoning Designation:

The Specific Plan Update would also amend the City's zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The existing and proposed zoning are shown in **Figures 5 and 6**.

8. Description of Project:

The project is a revision to the existing El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The Specific Plan Update would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Specific Plan Update would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

Specific Plan Planning Districts

The City adopted the existing El Segundo Downtown Specific Plan on August 1, 2000. The district boundaries within the existing Specific Plan were analyzed and refined for this update based upon existing community values, expected market demand, and shared characteristics, including the vision of a range of allowable uses and development standards to support the desired future condition of the districts. The district-based approach is by nature a "mixed-use" zoning approach, where the desired activities and building forms dictate what is conditionally allowed and what is not allowed. This hybrid approach to zoning combines form-based development standards with a selection of compatible uses tailored for each Specific Plan district and allows for shaping of the built environment, while providing flexibility in the types of allowable uses. The existing Downtown Specific Plan area is divided into six districts (Main Street District, Main Street Transitional District, Richmond Street District, North Richmond Street District, Grand Avenue District, and West Grand Avenue Transitional District) and the proposed Specific Plan Update would instead consolidate the Specific Plan area into four districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts. **Figure 7, Proposed Specific Plan Districts**, shows the boundaries of the proposed four districts.

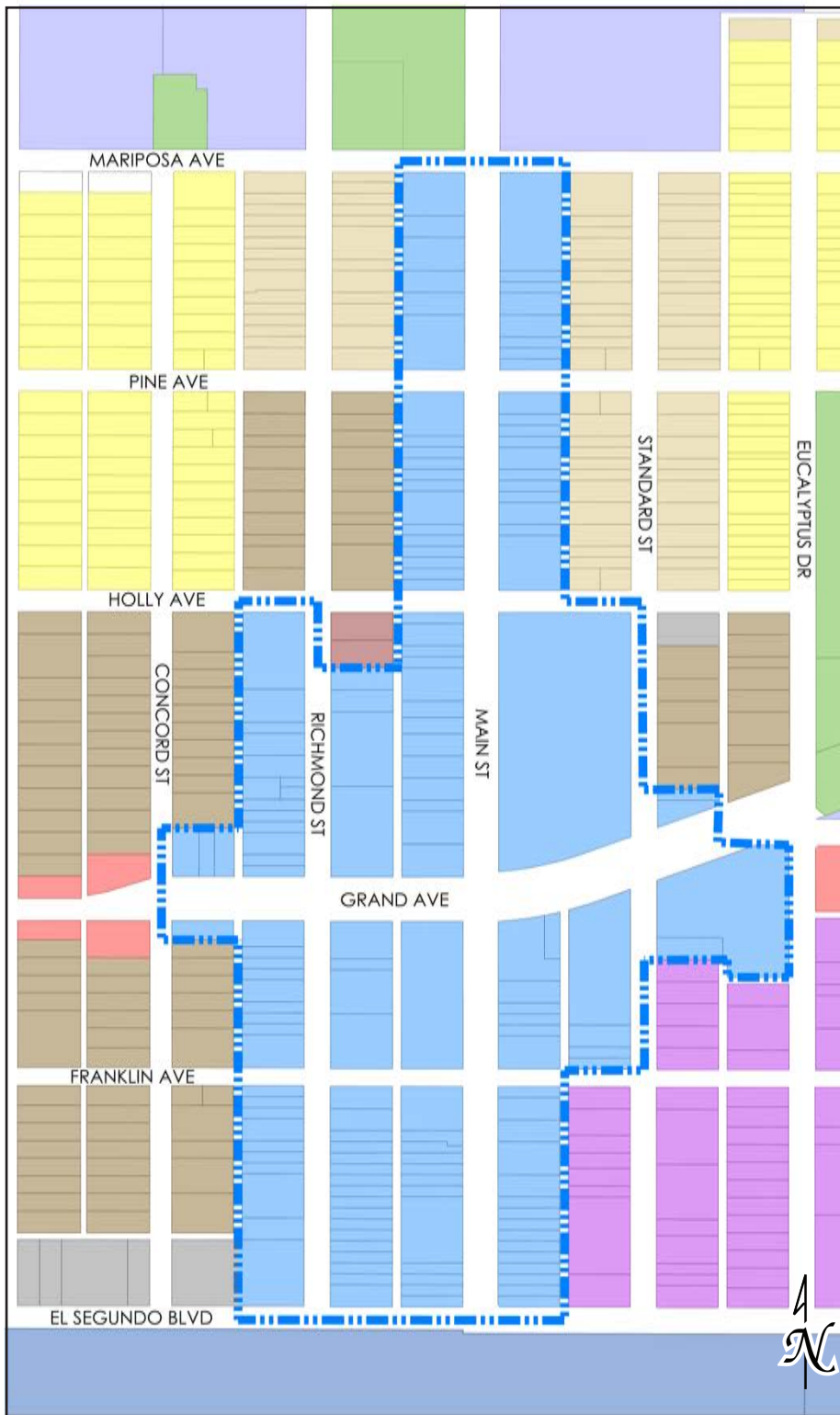


LEGEND

Project Area Boundary	Single-Family Residential	Downtown Commercial
Downtown Specific Plan	Two-Family Residential	General Commercial
Multi-Family Residential	Smoky Hollow	Public Facilities
Parks	Heavy Industrial	Parking

Source: RRM Design Group, August 2022.

Figure 3
Existing Land Use Designations



LEGEND

 Project Area Boundary	 Single-Family Residential	 Downtown Commercial
 Downtown Specific Plan	 Two-Family Residential	 General Commercial
	 Multi-Family Residential	 Public Facilities
	 Smoky Hollow	 Heavy Industrial
	 Parks	 Parking

Source: RRM Design Group, August 2022.

Figure 4
Proposed Land Use Designations



LEGEND

- - - Project Area Boundary
- Single-Family Residential (R-1)
- Two-Family Residential (R-2)
- Multi-Family Residential (R-3)
- Open Space (O-S)
- Downtown Specific Plan (DSP)
- Neighborhood Commercial (C-2)
- Public Facilities (P-F)
- Smoky Hollow West (SHW)
- Parking (P)
- Downtown Commercial (C-RS)
- Heavy Manufacturing (M-2)

Source: RRM Design Group, August 2022.

Figure 5
Existing Zoning



Source: RRM Design Group, August 2022.

Figure 6
Proposed Zoning

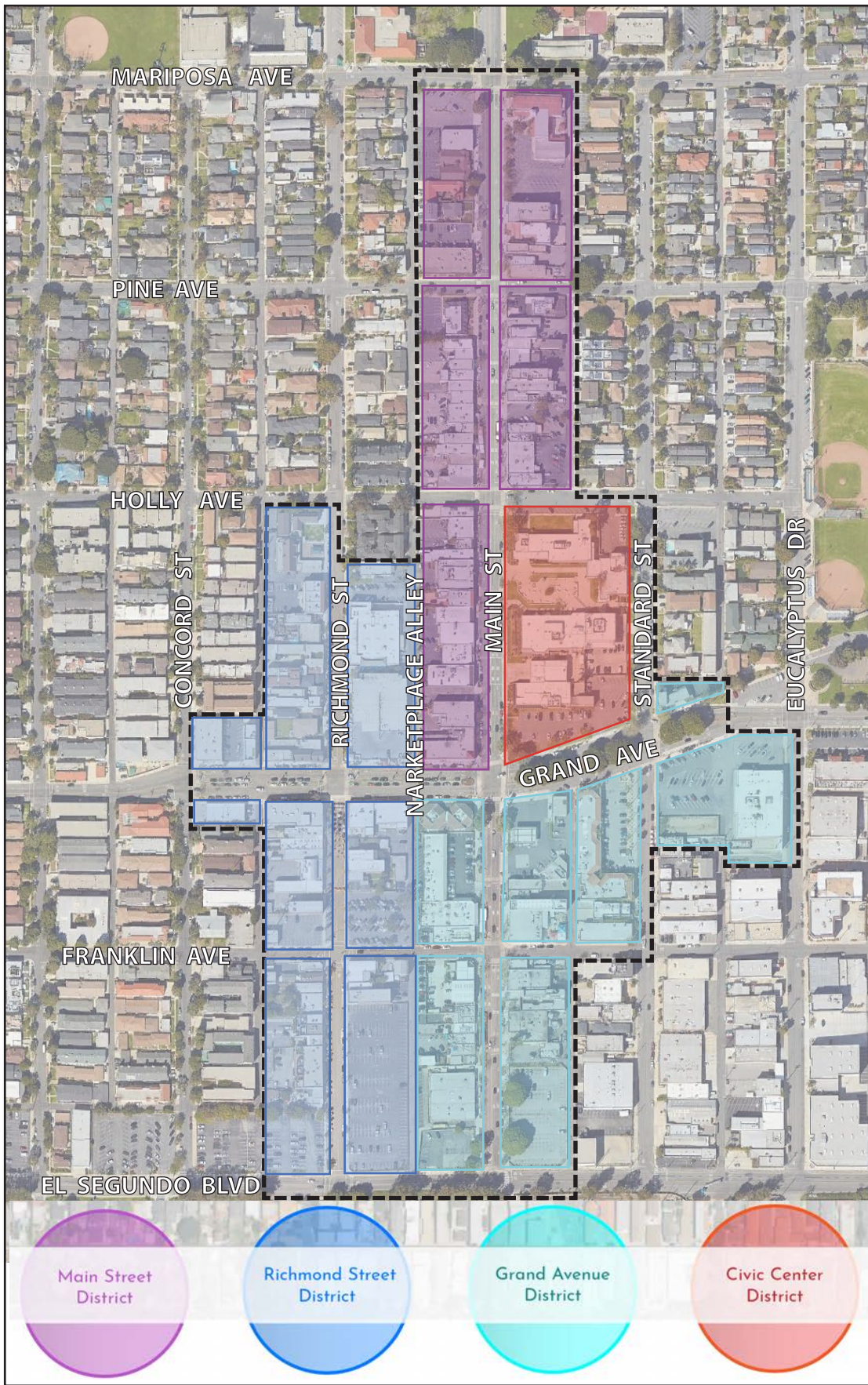


Figure 7
Proposed Specific Plan Districts

Main Street District

This district would be the Downtown core or “heart” and runs north-south along Main Street between Grand Avenue and Mariposa Avenue and is bounded by the alleys to the east and west. The district would contain a wide variety of commercial uses and abuts Multi-Family Residential (R-2 and R-3) uses to the east and west across the adjacent alleyways. This district would include portions of the previous existing Specific Plan districts: Main Street District and Main Street Transitional District.

The Main Street District would:

- Provide for a variety of uses including retail sales and services, restaurants and bars, with office and residential units permitted above and behind the ground floor Main Street frontage.
- Promote a pedestrian-oriented and family-friendly environment with outdoor dining, gathering areas, and enhanced streetscapes with additional lighting and places to sit and rest while enjoying the shade from the lush tree canopy.
- Incorporate standards that maintain and enhance the historic Downtown character with reduced building heights along the Main Street frontage, additional building form and articulation criteria to emulate typical 25-foot lot widths, additional transparency requirements on the ground floor to enhance the pedestrian experience, and buildings located at the street edge with parking located from behind accessed from the alley.

The proposed Main Street District would include development standards, including building form, massing, and articulation standards that maintain the historic small-town character of Downtown. Residential and office uses would be allowed above or behind Main Street retail. Parking would be required to be accessed from the alley. The existing DSP contains similar regulations. The DSP update would translate existing building regulations to focus on building form. Parking strategies would continue to allow for use of an in-lieu fee program to satisfy onsite parking requirements and parking would continue to be required to be accessed from the alley.

Currently, the Downtown Commercial designation allows billiard-pool rooms and bowling alleys; daycare centers; financial institutions; general offices; governmental buildings; medical-dental offices; restaurants; retail uses; and schools. The updated DSP would allow similar uses and reflect terminology for contemporary uses.

Allowed building heights along Main Street would be a maximum 30 feet at street edge and up to 45 feet with a 10-foot stepback from the front property line. Allowed building heights at alley frontages would be a maximum of 45 feet. Allowable height regulations would remain the same except for the stepback requirements which currently provide for a 25-foot stepback above the first floor that would be reduced to 10 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach.

Richmond Street District

This district would be similar in nature to the Main Street district, and it contains some of the oldest commercial buildings in the city, including the Old Town Music Hall. The district would abut Multi-Family Residential (R-3) uses to the west across the alley. It would be an eclectic mixed-use environment of commercial and residential uses and includes the existing Specific Plan districts: Richmond Street District, North Richmond Street District, Grand Avenue District, and West Grand Avenue Transitional District.

The Richmond street District would:

- Provide for a variety of uses including retail sales and service, restaurants and bars, residential units, professional, medical and dental offices, schools, and banks.
- Foster an eclectic mixed-use environment, allowing for more flexibility in the mixture of commercial uses including professional office and stand-alone residential permitted on the ground floor fronting Richmond Street.
- Celebrate the traditional “Old Town” character and entertainment uses within the area by encouraging entertainment options, outdoor dining, clubs, and restaurants and supporting filming related uses, antique stores, arts and crafts, and design studios.
- Enhance streetscapes with additional lighting, places to sit, and landscaping.

The proposed Richmond Street District would combine three of the existing districts (Richmond Street District, North Richmond Street District, Grand Avenue District, and West Grand Avenue Transitional District). This approach would create a common vision and more simplified zoning approach to this smaller area. Development would continue to be located at the street edge and complement the traditional building forms in the district. The DSP update contains a recommendation to improve pedestrian connectivity on Richmond Street (between Grand Avenue and Franklin Avenue) which would eliminate parking but accommodate opportunities for outdoor dining, expanded sidewalks and community gathering. An alternative future option would be to allow permanent closure of this street segment and create a multi-purpose plaza.

Currently, the Downtown Commercial designation allows billiard-pool rooms and bowling alleys; daycare centers; financial institutions; general offices; governmental buildings; medical-dental offices; restaurants; retail uses; and schools. The updated DSP would allow similar uses and reflect terminology for contemporary uses.

The proposed DSP would eliminate the City’s 25-foot setback requirements but keep the maximum building height of 45 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach. Parking strategies would continue to allow for use of an in-lieu fee program to satisfy onsite parking requirements and parking would continue to be required to be accessed from the alley.

Grand Avenue District

The Grand Avenue District would serve as a gateway from the west entry of the City of El Segundo to the Downtown core. This district would contain larger lots and contiguous parcels which provide the highest redevelopment opportunity within the Specific Plan area. The District would be bounded by multi-family residential uses (R-3) to the north with light industrial and office (SH-W) to the south which provide a buffer to surrounding single-family residential uses. This district would contain and include a few lots that are currently zoned C-RS and a portion of the previous 2000 Specific Plan's Main Street Transitional District.

The Grand Avenue District would:

- Provide an opportunity to create a more pedestrian-oriented environment and a location to accommodate an increased demand for office and residential uses within the city and with the maximum building heights permitted within the Specific Plan area.
- Develop a pedestrian-oriented destination with expanded sidewalks, planters, street trees and furnishings required at street edge, buildings rather than parking located at the street edge, and ground floor design criteria to establish additional window and door transparency along Main Street and Grand Avenue.
- Promote community amenities including common, publicly accessible, open space, public art, and enhanced pedestrian access in and around an individual project site.

The proposed Grand Avenue District would allow additional residential and office uses at higher densities and located on the ground floor. New development would be located at the street edge with an enhanced pedestrian environment on Grand Avenue and Main Street. This will be accomplished through building standards and by requiring parking to be onsite and located behind buildings.

Currently, the Downtown Commercial designation allows billiard-pool rooms and bowling alleys; daycare centers; financial institutions; general offices; governmental buildings; medical-dental offices; restaurants; retail uses; and schools. To address community needs and current market demand, the updated DSP would allow similar uses with additional opportunities for office and residential uses.

Allowed building heights along Main Street would be increased from a maximum of 45 feet to 60 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach. Buildings would have pedestrian-oriented ground floor designs with additional window and door transparency required along Main Street. Publicly accessible open space, enhanced pedestrian access in and around a site, and expanded sidewalks with planters, street trees and furnishings located at the street edge. Parking would be required on-site or via in lieu fees with minimal access points along Grand Avenue and Main Street.

Civic Center District

Located centrally in the Specific Plan area, this district includes City Hall, the El Segundo Police Department, the El Segundo Fire Department, and existing public plaza and open spaces. This district was part of the previous 2000 Specific Plan’s Main Street District.

The Civic Center District will:

- Allow for activities for all ages with enhanced and flexible multi-use outdoor gathering areas.
- Enhance opportunities for outdoor entertainment and temporary events and infuse outdoor retail uses such as newsstands, coffee carts, flower stands, vendors, and food trucks.
- Expand existing uses to include governmental offices and public safety facilities, recreational uses, outdoor entertainment and temporary events, outdoor retail uses, retail sales and services, residential units, and a location for a future public parking structure.

The proposed Civic Center District would redesign gathering spaces for outdoor entertainment and events, reduce lawn areas and add public uses and activities, and add a public parking structure to serve Downtown patrons, City Hall employees and visitors. A phased approach to civic center redevelopment is recommended.

The Civic Center District area would be removed from the current Main Street District to focus uses around civic and community needs and activities. This area lends itself to buildings with the greatest height in the DSP. Allowed building heights would be increased from 45 feet to 60 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach. Should the City decide to redevelop City Hall in a compact fashion, future opportunities for residential uses (not to exceed overall projected DSP capacity) and limited complementary commercial uses may be considered. Parking would continue to be required onsite with the additional opportunity for provision of public parking through the addition of a parking structure.

General Plan and Zoning Designations

The Specific Plan Update proposes to expand the boundaries of the Downtown Specific Plan area to include eight parcels located on Standard Street to the north and south of Grand Avenue. The eight parcels would require amendments to the Land Use Element of the City’s General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Specific Plan Update would also amend the City’s zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The existing and proposed land use and zoning are shown in **Figures 3** through **6**.

The Specific Plan Update is proposed to accommodate future market demand in the project area. The potential demand within the project area (through 2040) is shown in **Table 1, Proposed Land Use Increase in Downtown El Segundo**.

**Table 1
Proposed Land Use Increase in Downtown El Segundo**

Use	Proposed
Retail and Restaurant	130,000 square feet
Office	200,000 square feet
Medical Office	24,000 square feet
Residential Units	300 units

Mobility Enhancements

In addition to land use and zoning changes, the Specific Plan Update would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would involve changes to the number of travel lanes on those streets. The project would eliminate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue; include the potential closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue to create a permanent pedestrian only street for outdoor dining and gathering; and include buffered bicycle lanes on Main Street and Grand Avenue. The project would include pedestrian and transit improvements in the project area, including widened sidewalks. Transit improvements could include bus stop enhancements and potentially new and/or relocated bus stops. Widened sidewalks would also provide expanded outdoor seating and dining areas for area restaurants.

Lastly, the Specific Plan Update would include modifications to parking standards and strategies and alternatives for on-street parking and two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond and Franklin.

9. Surrounding Land Uses and Setting:

The existing land uses surrounding the Specific Plan area are generally residential in nature, ranging from one- to three-stories in height in a fully developed urban environment.

North

The El Segundo High School campus, El Segundo Library, and Library Park are located just north of the Specific Plan area on Main Street. The neighborhoods surrounding these civic uses are comprised mainly of single-family dwellings, duplexes, and apartment complexes.

West

An area zoned Neighborhood Commercial is located just west of the Specific Plan area. Less than a mile from the western edge of the Specific Plan is the Pacific Ocean coastline. Both Dockweiler Beach and El Segundo Beach are primarily accessed via Grand Avenue, which runs east-west through the city. The neighborhoods between Downtown El Segundo and the coast are comprised mainly of single-family dwellings, duplexes, and apartment complexes.

South

South of El Segundo Boulevard is the Chevron Refinery, which is zoned Heavy Industrial (M-2) and covers over 1,000 acres of land.

East

The neighborhoods to the east of the Specific Plan area are comprised of a mix of single-family dwellings, duplexes, and apartment complexes. The areas south and east of the Specific Plan area contain the Sleepy Hollow Specific Plan which are developed with light industrial, and office uses. El Segundo Recreation Park, located along Pine Avenue and Eucalyptus Drive, provides recreational facilities for a range of sports, including softball, roller hockey, tennis, and basketball.

10. Other Public Agencies Whose Approval Is Required:

No other approvals by outside public agencies are required.

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1:

The City of El Segundo typically initiates consultation with the Gabrielino-Tongva Tribe, Gabrielino/Tongva Nation, Gabrielino Tongva Indians of California Tribal Council, Gabrielino/Tongva San Gabriel Band of Mission Indians, and San Gabriel Band of Mission Indians—Kizh Nation and their designated tribal representatives. On January 12, 2023, the City sent letters to the above listed tribes to elicit input in the Specific Plan Update and requested information regarding tribal cultural resources within the City. Responses to the notification letters and results of any consultation will be discussed in the PEIR.

B. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

- | | | |
|---|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Energy |
| <input checked="" type="checkbox"/> Geology/Soils | <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality | <input checked="" type="checkbox"/> Land Use/Planning | <input type="checkbox"/> Mineral Resources |
| <input checked="" type="checkbox"/> Noise | <input checked="" type="checkbox"/> Population/Housing | <input checked="" type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Recreation | <input checked="" type="checkbox"/> Transportation/Traffic | <input checked="" type="checkbox"/> Tribal Cultural Resources |
| <input checked="" type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Wildfire | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

C. DETERMINATION

On the basis of this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because of the incorporated mitigation measures and revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

ASamaras

Signature

Paul Samaras

January 12, 2023

Date

Principal Planner

D. EVALUATION OF ENVIRONMENTAL IMPACTS

- 1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources cited. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards.
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect, and construction as well as operational impacts.
- 3) A “Less Than Significant Impact” applies when the proposed project would not result in a substantial and adverse change in the environment. This impact level does not require mitigation measures.
- 4) “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect is significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- 5) “Potentially Significant Unless Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The initial study must describe the mitigation measures and briefly explain how they reduce the effect to a less than significant level.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. AESTHETICS. Except as provided in Public Resources Code Section 21099 would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcrops, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Scenic Vistas and Scenic Resources

The City’s General Plan does not define any designated scenic vistas or resources in the City, which include the Specific Plan area. The General Plan includes an Open Space designation applied to areas that are preserved as usable or visual open space both publicly- and privately-owned. The Open Space Element states that open space provides visual relief from urban development and helps shape the urban form.

Visual Character

Existing development within the Specific Plan area ranges from one- to three-story buildings, with many buildings located along or near the front property line at one to two-story heights and a few two- to three-story buildings. The Specific Plan area is generally gently sloping with some steeper topography along portions Main Street and the Marketplace Alley.

Light and Glare

The Specific Plan area is developed with established existing sources of light and glare, such as streetlights and parking lights, walkway lights, lighted recreational facilities, and light emitted from residential and nonresidential buildings. The Specific Plan area is surrounded by other urbanized development on all sides. Many of the residential neighborhoods are surrounded or flanked with commercial and light manufacturing uses, which may create greater lighting effects.

Regulatory Setting

Regulations exist at local levels that guide development and influence the physical form and aesthetic character of the Specific Plan area and include:

- El Segundo General Plan
- El Segundo Municipal Code
- Downtown Specific Plan

Checklist Discussion

a) No Impact.

The El Segundo Downtown Specific Plan Update (Specific Plan Update) in and of itself does not propose or authorize any projects or development plan. In general, the purpose of the Specific Plan is to provide the opportunity to implement the vision of the community for the Downtown, while enhancing the quality small town environment for the residents.

Future development would be required to adhere to all city design guidelines and standards including the Zoning Ordinance, General Plan policies, and the Downtown Specific Plan development guidelines for a particular area. The Specific Plan Update proposes amendments to the Land Use Element of the City's General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Specific Plan Update would also amend the City's zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP).

No projects are proposed in Open Space designated areas. All future projects would be developed on sites that are designated as Downtown Specific Plan (DSP), which would allow residential, office, medical office, retail and restaurant uses. No areas currently designated as open space would be converted to urban uses and no development would be permitted to encroach on open space.

All future projects would be treated as individual projects and may be subject to specific environmental analysis. Nevertheless, there are no policies in the Specific Plan Update which either permit or promote development in areas that aren't currently developed with existing uses. There are no policies or programs in the Specific Plan Update that would directly affect scenic vistas nor any that would degrade the visual character of the City. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

b) No Impact.

There are no state scenic highways in the vicinity of El Segundo, including the Specific Plan area. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

c) Potentially Significant Impact.

The Specific Plan area is built out with a range of neighborhood serving commercial uses including retail, restaurants, offices, and banks; and there are some existing civic uses and residential units. The purpose behind the Specific Plan Update is to create a mix of uses and entertainment options and cohesive elements that tie the community and Downtown together, which could increase overall development

intensity compared to existing uses. The proposed DSP update would include development standards, including building form, massing, and articulation standards that would increase building heights, reduce or eliminate setbacks, and allow additional residential and office use at higher densities. Parking would be required on-site or in lieu and be accessed from alleys behind buildings.

Because implementation of the Specific Plan Update has the potential to change the overall scale and mass of development within the community, project impacts related to regulations governing scenic quality could **potentially be significant**. Therefore, this issue will be further analyzed within the Programmatic EIR.

d) *Potentially Significant Impact.*

The Specific Plan area is built out with a range of neighborhood serving commercial uses including retail, restaurants, offices, banks, and some existing civic uses and residential units. These uses include exterior building safety and security lighting, parking lot lighting, adjacent street lighting, and glass and metal building materials that produce glare. Therefore, the existing uses currently contribute to light and glare sources within the Specific Plan area. Further, implementation of the Specific Plan update could increase development intensity compared to existing uses and could introduce new potential sources of light and glare that could adversely affect daytime or nighttime views in the area. Therefore, project impacts related to light and glare could **potentially be significant** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
2. AGRICULTURE AND FORESTRY RESOURCES. 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 nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with existing zoning for, or cause rezoning of, forestland (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))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forestland or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to nonagricultural use or conversion of forestland to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The Specific Plan area is an urban environment designated for residential, commercial, and civic center uses and is essentially built out. There is no land within the City of El Segundo, including the Specific Plan area, designated or zoned for agricultural use, farmland, forest, or timber production nor are there any existing agricultural, farmland, forest or timber production uses. Pursuant to the Farmland Mapping and Monitoring Program, the City, including the Specific Plan area, is designated as Urban and Built Up Land and Non-Agricultural or Natural Vegetation (California Department of Conservation 2018).

Checklist Discussion

a), b), c), d), e) No Impact.

The Specific Plan Update does not propose or authorize any development. The Specific Plan Update would not convert any Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. No land within the City of El Segundo, including the Specific Plan area, is subject to the Williamson Act contract. As mentioned above, the City of El Segundo, including the Specific Plan area, does not have any land that is designated or zoned for forest use or timber production. Additionally, there are no nearby agricultural sites that would be affected by development within El Segundo, including the Specific Plan area. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
3. AIR QUALITY. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Both the U.S. Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established ambient air quality standards for common pollutants. Ambient air quality standards are set to protect public health and are levels of pollutants which represent safe levels that avoid specific adverse health effects. The ambient air quality standards cover what are called “criteria” pollutants because the health and other effects of each pollutant are described in criteria documents. The major criteria pollutants are ozone, carbon monoxide, nitrogen dioxide, and particulate matter. Both federal and state ambient air quality standards apply, as established by the U.S. Environmental Protection Agency (USEPA) and state air quality agencies (CALEPA for California). California air quality standards are generally more stringent than federal standards.

The City of El Segundo, which includes the Specific Plan area, is within the South Coast Air Basin (basin). In Los Angeles County, the South Coast Air Quality Management District (SCAQMD) is the agency responsible for protecting the public health and welfare through the administration of federal and state air quality laws and policies. This regional agency regulates air quality through its permit authority over most types of stationary emission sources and through its planning and review process.

Attainment Designations

Specific geographic areas that do not meet federal air quality standards (National Ambient Air Quality Standards [NAASQS]) or state air quality standards (California Ambient Air Quality Standards [CAAQS]) for a particular air quality pollutant are in “nonattainment” areas for the pollutant. The current federal and state attainment status for the basin is provided in **Table 2, Federal and State Air Quality Designations in the South Coast Air Basin.**

Table 2
South Coast Air Basin Attainment Status

Pollutant	Standard ¹	Averaging Time	Designation ²	Attainment Date ³
1-Hour Ozone	NAAQS	1979 1-Hour (0.12 ppm)	Nonattainment (Extreme)	2/6/2023 (not attained) ⁴
	CAAQS	1-Hour (0.09 ppm)	Nonattainment	N/A
8-Hour Ozone ⁵	NAAQS	1997 8-Hour (0.08 ppm)	Nonattainment (Extreme)	6/15/2024
	NAAQS	2008 8-Hour (0.075 ppm)	Nonattainment (Extreme)	7/20/2032
	NAAQS	2015 8-Hour (0.070 ppm)	Nonattainment (Extreme)	8/3/2038
	CAAQS	8-Hour (0.070 ppm)	Nonattainment	Beyond 2032
CO	NAAQS	1-Hour (35 ppm)	Attainment (Maintenance)	6/11/2007 (attained)
	CAAQS	8-Hour (9 ppm)	Attainment	6/11/2007 (attained)
NO ₂ ⁶	NAAQS	1-Hour (0.1 ppm)	Unclassifiable/Attainment	N/A (attained)
	NAAQS	Annual (0.053 ppm)	Attainment (Maintenance)	9/22/1998 (attained)
	CAAQS	1-hour (0.18 ppm) Annual (0.030 ppm)	Attainment	-
SO ₂ ⁷	NAAQS	1-Hour (75 ppb)	Designations Pending (expect Uncl./Attainment)	N/A (attained)
	NAAQS	24-Hour (0.14 ppm) Annual (0.03 ppm)	Unclassifiable/Attainment	3/19/1979 (attained)
PM ₁₀	NAAQS	1987 24-Hour (150 µg/m ³)	Attainment (Maintenance) ⁸	7/26/2013 (attained)
	CAAQS	24-Hour (50 µg/m ³) Annual (20 µg/m ³)	Nonattainment	N/A
PM _{2.5} ⁹	NAAQS	2006 24-Hour (35 µg/m ³)	Nonattainment (Serious)	12/31/2019
	NAAQS	1997 Annual (15.0 µg/m ³)	Attainment	8/24/2016
	NAAQS	2021 Annual (12.0 µg/m ³)	Nonattainment (Serious)	12/31/2025
	CAAQS	Annual (12.0 µg/m ³)	Nonattainment	N/A
Lead	NAAQS	3-Months Rolling (0.15 µg/m ³)	Nonattainment (Partial) ¹⁰	12/31/2015

Notes:

Source: <http://www.aqmd.gov/docs/default-source/clean-air-plans/air-quality-management-plans/naaqs-caaqs-feb2016.pdf>

¹ NAAQS = National Ambient Air Quality Standards, CAAQS = California Ambient Air Quality Standards

² U.S. EPA often only declares Nonattainment areas; everywhere else is listed as Unclassifiable/Attainment or Unclassifiable.

³ A design value below the NAAQS for data through the full year or smog season prior to the attainment date is typically required for attainment demonstration.

⁴ 1-hour O₃ standard (0.12 ppm) was revoked, effective June 15, 2005 ; however, the Basin has not attained this standard based on 2008-2010 data and is still subject to anti-backsliding requirements.

Table 2
South Coast Air Basin Attainment Status

<p>⁵ 1997 8-hour O3 standard (0.08 ppm) was reduced (0.075 ppm), effective May 27, 2008; the revoked 1997 O3 standard is still subject to anti-backsliding requirements.</p> <p>⁶ New NO2 1-hour standard, effective August 2, 2010; attainment designations January 20, 2012; annual NO2 standard retained.</p> <p>⁷ The 1971 annual and 24-hour SO2 standards were revoked, effective August 23, 2010; however, these 1971 standards will remain in effect until one year after U.S. EPA promulgates area designations for the 2010 SO2 1-hour standard. Area designations are still pending, with Basin expected to be designated Unclassifiable /Attainment.</p> <p>⁸ Annual PM10 standard was revoked, effective December 18, 2006; 24-hour PM10 NAAQS deadline was 12/31/2006; SCAQMD request for attainment redesignation and PM10 maintenance plan was approved by U.S. EPA on June 26, 2013, effective July 26, 2013.</p> <p>⁹ Attainment deadline for the 2006 24-Hour PM2.5 NAAQS (designation effective December 14, 2009) is December 31, 2019 (end of the 10th calendar year after effective date of designations for Serious nonattainment areas). Annual PM2.5 standard was revised on January 15, 2013, effective March 18, 2013, from 15 to 12 µg/m3. Designations effective April 15, 2015, so Serious area attainment deadline is December 31, 2025.</p> <p>¹⁰ Partial Nonattainment designation – Los Angeles County portion of Basin only for near-source monitors. Expect redesignation to attainment based on current monitoring data.</p>
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Air Quality Management Plan

Every three (3) years the SCAQMD prepares a new Air Quality Management Plan (AQMP), updating the previous plan and having a 20-year horizon. On December 2, 2022 CARB approved the 2022 AQMP. The 2022 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air. The 2022 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time.

The California Environmental Quality Act (CEQA) requires a discussion of any inconsistencies between a proposed project and applicable General Plans and Regional Plans (CEQA Guidelines Section 15125). The regional plan that applies to the proposed project includes the SCAQMD Air Quality Management Plan (AQMP). The SCAQMD CEQA Handbook states that "New or amended General Plan Elements (including land use zoning and density amendments), Specific Plans, and significant projects must be analyzed for consistency with the AQMP." Strict consistency with all aspects of the plan is usually not required. A proposed project would be consistent with the AQMP if it furthers one or more policies and does not obstruct other policies.

Sensitive Receptors

CARB and the Office of Environmental Health Hazard Assessment (OEHHA) have identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, infants (including in utero in the third trimester of pregnancy), and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Some land uses are considered more sensitive to air pollution than others due to the types of population groups or activities involved and are referred to as sensitive receptors. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to air quality and include:

- Federal Clean Air Act
- California Clean Air Act
- State Implementation Plan
- California Energy Code
- Regional Air Quality Strategy
- South Coast Air Quality Management District Rules and Regulations

Checklist Discussion

a) *Potentially Significant Impact.*

The Specific Plan Update involves amendments to the Land Use Element of the City’s General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Specific Plan Update would also amend the City’s zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The proposed DSP Update would increase permissible housing density in certain areas (or now allow them where they were not previously allowed). The Specific Plan Update therefore has the potential to increase residents, housing, and employment opportunities within the Specific Plan area, which could result in indirect population growth that could conflict with the applicable air quality management plan. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

b), c) *Potentially Significant Impact.*

The Specific Plan Update would provide direction for streetscape beautification, outdoor gathering spaces, improved mobility, and other enhancements that would establish a unique and inviting environment in the Downtown area. The proposed DSP update would include development standards, including building form, massing, and articulation standards that would increase building heights, reduce or eliminate stepbacks, and allow additional residential and office use at higher densities. The proposed DSP would allow for refined and simplified uses. Future construction activities could include demolition, grading, site preparation, building construction, paving, and architectural coating phases. This would result in emissions of criteria pollutants due to the use of heavy-duty construction equipment and fugitive dust generated during ground disturbing activities.

Operation of future uses in the Specific Plan area would primarily result in criteria pollutant emissions from vehicle trips of employees, residents, and visitors traveling to the area, as well as small quantities of emissions from landscaping equipment, energy use, and cleaning products. As there is a potential for emittance of criteria pollutants in excess of the applicable thresholds and exposure to sensitive receptors to pollutants, these issues could be a **potentially significant impact**. Therefore, this issue will be further analyzed within the Programmatic EIR.

d) *Potentially Significant Impact.*

Short-Term (Construction) Emissions/Odors

Future development construction activities could result in minor amounts of odor compounds associated with diesel heavy equipment exhaust and architectural coatings. These compounds would be emitted in various amounts at various locations during construction and potentially effect nearby sensitive receptors. Therefore, impacts related to construction-generated odors would be **potentially significant**. Therefore,

this issue will be further analyzed within the Programmatic EIR.

Long-Term (Operational) Emissions/Odors

The proposed DSP would potentially result in the operation of new land uses, including restaurants, medical offices, etc. The Specific Plan Update would potentially create new land uses that, in the long-term operation, have the potential to create odors. Therefore, impacts related to odors generated from operations from the Specific Plan Update would be **potentially significant**. Therefore, this issue will be further analyzed within the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. 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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have a substantial adverse effect on state or federally protected wetlands a (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The City of El Segundo, including the Specific Plan area, is a dense and urban community with very limited vacant land. The City is bounded by urban development to the north, east, and south. The western boundary of the City includes 0.8 miles of shoreline along the Santa Monica Bay. With the exception of the shoreline area, the City is fully developed with urbanized uses.

The General Plan includes an Open Space designation applied to areas that are public parks or private land reserved for open spaces. However, all these lands are either developed with park uses or utility infrastructure and surrounded by urbanized areas.

Although there are areas within El Segundo that contain sensitive habitat for the coastal habitat for the El Segundo Blue Butterfly, these areas are located in coastal areas and not within the Specific Plan area. As described in the General Plan Conservation Element, the El Segundo Blue Butterfly is listed on the federal endangered species list, and is dependent upon and rarely strays from coastal buckwheat plants. At this time, the butterfly occurs on a 1.96 acre preserve adjacent to and maintained by the Chevron Refinery and in the dune area under the flight path of the Los Angeles International Airport, neither of which are located within the Specific Plan area.

The shoreline is classified as Estuarine and Marine Wetland on the U.S. Fish and Wildlife Service's National Wetlands Inventory. One area of the City is shown as Freshwater Emergent Wetland. This area is located in the western area of the City on undeveloped land near the Hyperion Water Treatment Plant, located approximately 1.5 miles northwest of the Specific Plan area. There are several areas south of Grand Avenue and west of Vista Del Mar that are classified as Freshwater Ponds. This area is located approximately 0.7 mile west of the Specific Plan area. Other than these areas, there are no sensitive habitats, riparian habitats, or wetlands in the City, including the Specific Plan area.

The City has ordinances related to the removal of City street trees by private individuals but does not have a tree preservation policy or ordinance.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to biological resources and include:

- Federal Endangered Species Act
- Federal Migratory Bird Treaty Act
- Federal Clean Water Act
- California Endangered Species Act
- California Fish and Game Code
- Natural Community Conservation Planning Act
- Porter-Cologne Water Quality Control Act
- City of El Segundo General Plan
- City of El Segundo Municipal Code (Title 9, Chapter 3)

Checklist Discussion

a) b) c) d) Less than Significant Impact.

The project is a revision to the existing El Segundo Downtown Specific Plan.

The Specific Plan area is located in urbanized area that have been developed previously. Inasmuch as the Specific Plan Update could indirectly result in commercial and residential development and improvement, the project could result in increased density in residential, commercial, and mixed-use areas of the City. However, the City is largely built-out and the City's General Plan Land Use Element and zoning code focuses growth into urbanized portions of the City.

No development is proposed on or near the areas mapped as wetlands. Because the areas where potential development may occur have already been disturbed through urban development, no significant changes are anticipated in the diversity or number of species of plants or animals, or in the deterioration of existing wildlife habitat. No riparian habitat, wetlands, wildlife corridors or nurseries would be impacted.

Existing applicable federal, state, and/or local policies would prevent development in areas that support sensitive or special status species, federally protected wetlands, or migration corridors.

Accordingly, adoption of the Specific Plan Update would have a **less than significant impact** on biological resources, including candidate, sensitive, or special-status species; riparian habitat or other sensitive natural community; federally protected wetlands a (including, but not limited to marsh, vernal pool, coastal, etc.); or native resident or migratory fish or wildlife species, corridors, or nurseries. No mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

e) No Impact.

The project is a revision to the existing El Segundo Downtown Specific Plan. The City does not have a tree preservation ordinance for trees on private property. In the event future development requires the removal of trees on City property, as part of the approval process the developer would be required to comply with City policies related to tree removal and replacement. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

f) No Impact.

The City does not have a Habitat Conservation Plan nor Natural Community Conservation Plan. The Specific Plan area is located within a fully developed, urban setting surrounded by office, commercial, and residential land uses void of native plant or animal life and limited cover and foraging habitat and the Specific Plan Update would not significantly impact biological resources. There are no Habitat Conservation Plans or Natural Community Conservation Plans applicable to these areas. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The City, which includes the Specific Plan area, was incorporated in 1917. The City has very distinct and identifiable areas. The City has a very strong residential base, which is a mixture of single-family, two-family, and multi-family residential structures. The Downtown area includes the Civic Center. Near the Downtown is Smoky Hollow, an older industrial area that contains mostly older industrial buildings of one or two stories.

Areas south of El Segundo Boulevard and west of Pacific Coast Highway are mostly occupied by the Chevron Refinery, which occupies approximately one-third of the City. The Refinery also occupies a portion of the coastal zone, along with a Southern California Edison Generating Station. The beach area is publicly owned and accessible.

Areas of the City east of Pacific Coast Highway consist of a combination of industrial, office, and commercial uses. This area contains the large areas of development consisting of a mixture of office and research and development uses, as well as the U.S. Air Force Base.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to cultural resources and include:

- National Historic Preservation
- National Register of Historic Places
- Federal Native American Graves Protection and Repatriation Act
- California Register of Historic Resources
- CEQA Guidelines Section 15064.5
- California Native American Graves Protection and Repatriation Act
- California Public Resources Code Section 5097
- Assembly Bill 52
- Senate Bill 18
- El Segundo General Plan Conservation Element
- El Segundo Municipal Code

Checklist Discussion**a) *Potentially Significant Impact.***

The Specific Plan Update itself does not propose or authorize any specific development and would not result in physical alterations or improvements. However, future development in the Specific Plan Update area would occur in urban areas that are currently developed and could potentially affect historic and cultural resources. Buildings that are not considered historic resources at this time, would need to be evaluated to determine if any are historic resources. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

b) *Potentially Significant Impact.*

It is unknown if there are any archaeological resources in the Specific Plan area, which is comprised of previously developed and disturbed areas. Because future project excavations would extend into undisturbed, native soils, there is the potential for project construction to impact previously undiscovered archaeological resources. In the unlikely event that future development does disturb archaeological resources, within the Specific Plan area, compliance with state regulations pertaining to discovery of archaeological resources would ensure that impacts are avoided. Regardless, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

c) *Potentially Significant Impact.*

It is unlikely that human remains would have been discovered and left in situ or re-interred within the Specific Plan area. Within the project sites that are fully developed, and it is unlikely that human remains exist on-site. However, because any future project excavations would extend into undisturbed, native soils, there is the potential for project construction to impact previously undiscovered human remains. In the unlikely event that future development does disturb human remains, compliance with state regulations pertaining to discovery of human remains, including California Health and Safety Code Section 7050.5, which states that no further disturbance shall occur until the County Coroner has made a determination of the origin and disposition pursuant to Public Resources Code Section 5097.98, would ensue. Regardless, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Electricity

Electricity is provided to the City, which includes the Specific Plan area, by Southern California Edison (SCE). SCE provides electric power to more than 15 million persons, within a service area encompassing approximately 50,000 square miles. SCE derives electricity from varied energy resources including: fossil fuels, hydroelectric generators, nuclear power plants, geothermal power plants, solar power generation, and wind farms. SCE also purchases from independent power producers and utilities, including out-of-state suppliers.

Natural Gas

Natural gas is provided to the City, which includes the Specific Plan area, by Southern California Gas (SoCalGas).

Regulatory Setting

Regulations exist at federal, state, and regional levels with regard to energy and include:

- Federal Corporate Average Fuel Economy (CAFE) Standards
- Federal Energy Independence and Security Act
- California Building Energy Efficiency Standards (Title 24, Part 6)
- California Green Building Standards (Title 24, Part 11)
- California’s Renewable Portfolio Standard
- Senate Bill 350
- Senate Bill 100
- Assembly Bill 32 (California Global Warming Solutions Act of 2006) and Senate Bill 32
- Assembly Bill 1493 (Pavley I)
- Executive Order S-1-07 (California Low Carbon Fuel Standard)
- California Air Resources Board:
 - Advanced Clean Car Regulation
 - Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling
 - Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen, and other

Criteria Pollutants from In-Use Heavy-Duty Diesel-Fueled Vehicles

- Sustainable Communities Strategy (SB 375)
- Assembly Bill 758
- Senate Bill 1389
- City of El Segundo Climate Action Plan

Checklist Discussion

a), b) *Potentially Significant Impact.*

The Specific Plan Update has the potential to incent development projects that would increase residents, housing, and employment opportunities within the Specific Plan area, which could result in potential impacts to due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction or operation. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Faulting and Seismicity

There are no major fault zones located within the City of El Segundo. However, there are several faults within the region that could have an impact on the City, which includes the Specific Plan area. Active faults that could affect the City include the Newport-Inglewood, Charnock, Santa Monica, Sierra Madre, and Palos Verdes Fault Zones. Other faults that could affect the City include the Verdugo, San Fernando, and San Andreas Faults. The San Andreas Fault is approximately 55 miles northeast of the City and is considered

the most seismically active fault in the southern California region. These faults are all close enough or expected to generate strong enough shaking that could affect the City. However, the level of seismicity in El Segundo, both as to maximum credible earthquake intensity and likely earthquake occurrences, is the same as for the rest of the Los Angeles Basin.

The City is not at significant hazard from surface rupture as the nearest fault is the Newport-Inglewood, which is 5 miles from the City.

Terrain and Soil Conditions

With the exception of a very small area adjacent to the Hyperion Water Reclamation Plant, the City, including the Specific Plan area, is relatively flat; therefore, the risk of landsliding is low. Some areas of the City are located on sand dune formations with high groundwater tables. These soils are considered susceptible to liquefaction and are located 0.80 miles west of the Specific Plan area.¹

Paleontological Resources

Based on prior paleontological investigations performed for the Crenshaw Transit Corridor Project and LAX Master Plan Final EIS/EIR, sensitive paleontological resources were identified in the vicinity of the City. Therefore, there is some potential and sensitivity for paleontological resources to occur in the Specific Plan area.

Regulatory Setting

Regulations exist at state and local levels with regard to geology and soils and include:

- California Alquist-Priolo Earthquake Fault Zoning Act
- California Seismic Hazards Mapping Act
- California Building Code
- El Segundo Building Code
- El Segundo General Plan Public Safety Element

Checklist Discussion

a.i-ii) *Less Than Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan.

Indirect impacts could occur through potential future development. Objectives of the Specific Plan Update would encourage and facilitate the redevelopment of underutilized sites within the Downtown area, including along primary transit corridors, but it does not propose specific development projects. As all areas of the City are essentially built-out, all future development would be infill and/or replacement of existing uses.

As southern California is seismically active, potential impacts associated with seismic hazards, including

¹ California Department of Conservation, *Earthquake Zones of Required Investigation Map*: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed December 2022.

rupture of a fault, strong seismic shaking and seismic-related ground failure currently exist. Earthquakes that could affect the City, including the Specific Plan area, would most likely originate from the Newport-Inglewood, Charnock, Santa Monica, Sierra Madre, Palos Verdes, Verdugo, San Fernando, and San Andreas Faults. These faults are close enough in proximity or expected to generate strong enough shaking that could affect the City. As future development would only occur on sites currently or previously developed, impacts resulting from potential construction would be the same as under current conditions.

The General Plan addresses geology and soils in the Safety Element, and the City has adopted the California Building Code that includes provisions for construction in seismically active areas, and on different types of soils. The level of seismicity in El Segundo, both as to maximum credible earthquake intensity and likely earthquake occurrences, is approximately the same as for the Los Angeles Basin. Adherence to regulatory codes, such as Uniform Building Code (UBC) and California Building Code (CBC), would ensure that all new development would be built to adequately withstand strong seismic ground shaking through proper engineering and design. Depending on location and scope, applicants may be required to prepare geologic reports to address potential geologic impacts associated with the development of the site. The City ensures compliance with development requirements at the time of building permits are issued.

Neither adoption of the Specific Plan Update nor any future development within the urban/developed core would result in potential impacts associated with seismic hazards that don't currently exist. Therefore, impacts related to geology and soil, such as faulting, groundshaking, and soil instability would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

a.iii) *Less than Significant Impact.*

Strong seismic ground shaking could result in liquefaction of poorly consolidated and saturated soils. Liquefaction occurs when water-saturated sediments are subjected to extended periods of shaking. The Safety Element of the El Segundo General Plan states that some areas of the City are located on sand dune formations with high groundwater tables. As previously discussed, these soils are located 0.80 miles west of the Specific Plan area.² Regardless, adherence to regulatory codes, such as UBC and CBC, would ensure new structures be built to adequately withstand liquefaction or ground failure associated with strong seismic ground shaking through proper engineering and design. This would limit the potential impact to **less than significant**, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

a.iv) *No Impact.*

The Specific Plan area is relatively flat, therefore, all future potential development sites are all located in areas that are predominately flat. Therefore, the potential for seismically-induced landslides to occur is low. Though landslides in the urban area are unlikely, future development in the City would be required to adhere to all applicable UBC and CBC standards. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

² California Department of Conservation, *Earthquake Zones of Required Investigation Map*: <https://maps.conservation.ca.gov/cgs/EQZApp/app/>. Accessed December 2022.

b) *Less than Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Soil erosion or loss of topsoil would generally not occur as the Specific Plan area is primarily built out. No changes to policies resulting in increased erosion would occur. Continued adherence to the standards of the existing CBC and compliance with the National Pollutant Discharge Elimination System (NPDES) permit and Storm Water Pollution Prevention Plan (SWPPP) requirements, as well as implementation of best management practices, would limit impacts related to soil erosion. Additionally, all future development would be required to implement Best Management Practices (BMPs) for construction activities as specified by the California Storm Water Best Management Practices Handbook and/or the City's Storm Water BMP Manual. The BMPs include measures guiding the management and operation of construction sites to control and minimize the volume of surface runoff. These measures address procedures for controlling erosion and sedimentation and managing all aspects of the construction process. All future development projects must comply with all City, state, and federal standards pertaining to stormwater run-off and erosion. As such, impacts would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

c), d) *Less than Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. New developments would be located on sites that have already been developed. It is unlikely that a new structure on a previously or currently occupied site designated for urban use would experience unstable conditions that were not previously encountered. Future risks would be similar those that currently exist. Additionally, proper engineering and adherence to required building standards, such as the UBC and CBC should ensure that impacts would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

e) *No Impact.*

The Specific Plan area is entirely located within the urbanized area of the City. The City, which includes the Specific Plan area, is served by existing sewer infrastructure. No septic tanks would be required. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

f) *Potentially Significant Impact.*

Paleontological resources are the fossilized remains of organisms that have lived in a region in the geologic past and whose remains are found in the accompanying geologic strata. This type of fossil record represents the primary source of information on ancient life forms, since the majority of species that have existed on earth from this era are extinct. Although future development would be constructed on infill sites or other sites that are currently occupied with structures and have previously been graded, these structures may require excavation deeper than was previously conducted. Therefore, future development resulting from the Specific Plan has the potential to directly or indirectly destroy paleontological resources. Impacts would be **potentially significant**, and will be further evaluated in detail in the Programmatic EIR.

With regard to a unique geologic feature, the Specific Plan area is currently developed with commercial, residential, and surface parking uses and there are no unique geologic features in the Specific Plan area. Therefore, the project would not directly or indirectly destroy a unique geologic feature. **No impacts**

would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Global temperatures are moderated by naturally occurring atmospheric gases. These gases are commonly referred to as greenhouse gases (GHGs) because they function like a greenhouse, allowing solar radiation (sunlight) into the Earth’s atmosphere but prevent heat from escaping, thus warming the Earth’s atmosphere. GHGs, as defined under California’s Assembly Bill (AB) 32, include carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF6). GHGs are emitted by natural processes and human (anthropogenic) activities. Anthropogenic GHG emissions are primarily associated with (1) the burning of fossil fuels during motorized transport, electricity generation, natural gas consumption, industrial activity, manufacturing, and other activities; (2) deforestation; (3) agricultural activity; and (4) solid waste decomposition. GHG emissions from human activities are the most significant driver of observed climate change since the mid-20th century.³ Global climate change refers to changes in average climatic conditions over the entire Earth, including temperature, wind patterns, precipitation, and storms.

Regulatory Setting

Regulations exist at federal, state, regional, and local levels with regard to GHGs and include:

- Federal Clean Air Act
- Light Duty Vehicle Greenhouse Gas Emissions Standards and Corporate Average Fuel Economy Standards
- California Code of Regulations, Title 24, Part 6
- California Green Building Standards Code
- Executive Order S-3-05
- Assembly Bill 32 – Global Warming Solution Act of 2006
- Senate Bill 375
- Senate Bill 743
- Senate Bill 97

³ *United Nations Intergovernmental Panel on Climate Change, Climate Change 2013: The Physical Science Basis, Working Group I Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, 2013.*

- Executive Order B-30-15
- Senate Bill 32 and Assembly Bill 197
- Assembly Bill 1493 – Vehicular Emissions of Greenhouse Gases
- Assembly Bill 341
- Executive Order S-01-07
- Senate Bill 350
- Senate Bill 100
- California Air Resources Board: Scoping Plan

Checklist Discussion

a) *Potentially Significant Impact.*

Greenhouse gas (GHG) emissions refer to a group of emissions that are believed to affect global climate conditions. These gases trap heat in the atmosphere and the major concern is that increases in GHG emissions are causing global climate change. Global climate change is a change in the average weather on the earth that can be measured by wind patterns, storms, precipitation, and temperature. Construction and operation of future projects in the Specific Plan area would generate GHG emissions from the use of construction equipment, construction workers' vehicles, operational energy use, and operational project trips to and from project sites, which may significantly impact the environment either directly or indirectly. Therefore, GHG impacts could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

b) *Potentially Than Significant Impact.*

Construction and operation of future projects in the Specific Plan area would generate GHG emissions, which may conflict with the policies and goals of GHG-reduction plans, including, but not limited to, the SCAG RTP/SCS, Assembly Bill (AB) 32 Scoping Plan, and Executive Orders S-03-05 and B-30-15. Therefore, impacts with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonable foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles or 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Hazardous Materials

Hazardous materials encompass a wide range of substances, some of which are naturally occurring and some of which are manufactured. Examples of hazardous materials include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos, and chemical compounds used in manufacturing. Hazardous materials are used for a variety of purposes, including service industries, various small businesses, medical uses, schools, and households. Many chemicals used in household cleaning, construction, dry cleaning, film processing, landscaping, and automotive maintenance and repair are considered hazardous. Small-quantity hazardous waste generators include facilities such as automotive repair, dry cleaners, and medical offices. Hazardous materials could pose a substantial present

or future hazard to human health or the environment when improperly handled, disposed, or otherwise managed.

Other Hazards

According to CAL FIRE, the City of El Segundo is not located in a Very High Fire Hazard Severity Zone.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to hazards and hazardous materials and include:

- Comprehensive Environmental Response, Compensation, and Liability Act
- Resources Conservation and Recovery Act
- Hazardous Materials Transportation Act
- Federal Aviation Regulations Part 77
- California Code of Regulations
- Hazardous Materials Release Response Plans and inventory Act
- Emergency Response to Hazardous Materials Incidents
- California Government Code Section 65962.5
- Emergency Response to Hazardous Materials Incidents
- Los Angeles County 2019 All-Hazards Mitigation Plan
- City of El Segundo Fire Department CUPA Area Plan for Emergency Response to Hazardous Materials Incidents
- City of El Segundo General Plan
- City of El Segundo Municipal Code

Checklist Discussion

a) *Less Than Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Potential future projects would be comprised of residential, office, medical office, retail and restaurant uses on sites that are currently developed. The proposed DSP Update would potentially increase the density of these types of uses; however, the occasional use or disposal of hazardous materials generally associated with these types of uses include unused paint, aerosol cans, cleaning agents (solvents), landscaping-related chemicals, and other common cleaning products and household substances. These materials are generally disposed of at non-hazardous Class II and III landfills (along with municipal solid waste). With compliance with the required procedures and guidelines during construction and throughout operation, impacts to the public and the environment associated with future development due to the routine transport, use, and disposal of hazardous materials would be less than significant. Therefore, impacts would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

b) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Construction of future projects in the Specific Plan area could involve the use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. In addition, the soils in the Specific Plan area may contain contamination. Construction activities involving disturbance of contaminated soils could potentially create a significant hazard for construction workers and adjacent properties through upset or accident conditions. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

Though construction activities have the potential to result in upset or accidental releases of hazardous materials, operation of future uses in the Specific Plan area, which would be comprised of residential, office, medical office, retail and restaurant uses, would not involve the use or storage of significant quantities of hazardous materials. As discussed under Response (a), operational use of hazardous materials would be limited to small quantities of cleaning solvents, paints, and landscaping maintenance materials. Although it is anticipated operation of these uses would not create a significant hazard to the public or the environment through any reasonably foreseeable upset and accident conditions involving the release of hazardous materials this potential impact will be further evaluated in detail in the Programmatic EIR.

c) *Potentially Significant Impact.*

El Segundo High School is located approximately 0.08 mile north of the Specific Plan area. Future development must comply with the applicable federal, State, and local Fire Department requirements regard the handling of hazardous materials. Future construction would involve the temporary use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, standard construction BMPs for the use and handling of such materials would avoid or reduce the potential for such conditions to occur. Any use of potentially hazardous materials during construction of future projects would comply with all local, state, and federal regulations regarding the handling of potentially hazardous materials, including Title 49 of the Code of Federal Regulations and Title 22, Division 4.5 of the California Code of Regulations. However, as discussed above under Item b., project construction has the potential for accidental release of hazardous substances associated with on-site soil contamination. Thus, construction activities associated with future uses have the potential to emit hazardous emissions or handle hazardous substances within 0.25 mile of a school. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

d) *Potentially Significant Impact.*

Downtown El Segundo is located near the north entrance to the Chevron Refinery. There is the potential that future project sites are contained within a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 due to the location of the Chevron Refinery. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

e) *Potentially Significant Impact.*

A small portion of the Specific Plan area is located within of the airport influence area established by the Los Angeles County Airport Land Use Commission. Therefore, portions of the Specific Plan area are within

the area subject to the LAX Comprehensive Land Use Plan.⁴ This issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

f) Potentially Significant Impact.

The project is a revision to the existing El Segundo Downtown Specific Plan. Future projects in the Specific Plan area would not interfere with the City's adopted Emergency Operations Plan (EOP) because projects would be reviewed to ensure that new development would not create barriers to evacuation plans.

The Specific Plan Update would not involve the development of structures that could potentially impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Construction activities have the potential to temporarily impact traffic and vehicle speeds on adjacent roadways; however, these impacts would be temporary and emergency access to these roadways would not be blocked by future project construction. Furthermore, applicants would coordinate with the City to ensure appropriate construction staging areas and adequate vehicular and pedestrian access are temporarily provided on adjacent roadway. Any future project would be required to comply with all applicable City codes and regulations pertaining to emergency response and evacuation plans maintained by the police and fire departments, as well as fire protection and security on the sites.

However, the Specific Plan Update would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would create potential changes to the number of travel lanes on those streets. The project would eliminate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue; proposes the potential closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue to create a permanent pedestrian only street for outdoor dining and gathering; and include buffered bicycle lanes on Main Street and Grand Avenue. The project would include pedestrian and transit improvements in the project area. including widened sidewalks. Transit improvements could include bus stop enhancements and potentially new and/or relocated bus stops. Widened sidewalks would also provide expanded outdoor seating and dining areas for area restaurants. As a result, the Specific Plan Update has the potential to conflict with applicable emergency response and evacuation plan. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

g) No Impact.

According to CALFire, the City, which includes the Specific Plan area, is not located in a Very High Fire Hazard Severity Zone.⁵ Future development within the Specific Plan area would not be subject to any more risk than other development in the City not located within a Very High Fire Hazard Severity Zone. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

⁴ County of Los Angeles, Airport Influence Area Map: <https://geohub.lacity.org/datasets/lacounty::airport-influence-area-1/explore?location=33.948437%2C-118.398020%2C13.00>. Accessed December 2022.

⁵ Cal Fire, State Responsibility Area Viewer, website: <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=468717e399fa4238ad86861638765ce1>. Accessed: December 2022.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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:				
i) result in substantial erosion or siltation on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) impede or redirect flood flows?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Groundwater

The City, which includes the Specific Plan area, is located within the West Coast Groundwater Basin. Since 1962, the West Coast Basin has been an adjudicated groundwater basin, and the amount of groundwater extracted is limited by court judgment. The City no longer withdraws from this groundwater source as it receives its water from the West Basin Municipal Water District. West Basin purchases imported water from the Metropolitan Water District of Southern California and wholesales the imported water to cities and private companies in southwest Los Angeles County, including the City of El Segundo.

Surface Water

The City is bounded to the west by the Pacific Ocean. No surface waters of resource exist in the City, including the Specific Plan area.

Flooding

The Federal Emergency Management Agency (FEMA) is mandated by the National Flood Insurance Act of 1968 and the Flood Disaster Protection Act of 1973 to evaluate flood hazards and provide Flood Insurance Rate Maps (FIRMs) for local and regional planners to promote sound land use and floodplain development. Further, the Flood Disaster Protection Act requires owners of all structures in identified Special Flood Hazard Areas to purchase and maintain flood insurance as a condition of receiving Federal or federally related financial assistance, such as mortgage loans from federally insured lending institutions. The National Flood Insurance Reform Act of 1994 further strengthened the National Flood Insurance Program (NFIP) by providing a grant program for State and community flood mitigation projects. The act also established a system (Community Rating System - CRS) for crediting communities that implement measures to protect the natural and beneficial functions of their floodplains, as well as managing the erosion hazard.

The only area of the City located in a flood zone is the 0.8-mile frontage along the Pacific Ocean, which is considered a Special Flood Hazard Area. The Specific Plan area is located approximately 1.0 mile east of the Pacific Ocean.

Regulatory Setting

Regulations exist at federal, state, regional, and local levels with regard to hydrology and water quality and include:

- Clean Water Act/National Pollutant Discharge Elimination System Requirements
- National Flood Insurance Program
- NPDES Construction General Permit
- NPDES Groundwater Permit
- NPDES Municipal Permit
- Porter-Cologne Water Quality Control Act
- Water Quality Control Plan for the San Diego Basin
- Los Angeles County 2019 All-Hazards Mitigation Plan
- City of El Segundo General Plan
- City of El Segundo Municipal Code

Checklist Discussion

a) *Less than Significant Impact.*

Construction would require earthwork activities including excavation of on-site soils and site grading. During earthwork activities, exposed and stockpiled soils on the construction site could be subject to minor erosion and conveyed via stormwater runoff to municipal storm drains and into the Pacific Ocean.

However, any project construction would occur in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (Order No. 99-08)-DWQ)

and the El Segundo Municipal Code Chapter 5-4. The El Segundo Municipal Code Chapter 5-4 specifies Best Management Practices (BMPs) that must be used during construction to prevent or reduce pollutant loading from stormwater or non-stormwater discharges to receiving waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

With compliance with regulatory requirements, pollutant levels in urban runoff during construction would be minimized. Therefore, project construction impacts related to the violation of water quality standards or waste discharge requirements would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

b) *Less than Significant Impact.*

The City, which includes the Specific Plan area, is located within the West Coast Groundwater Basin. The project could result in construction earthwork and groundwater may encountered during excavation in the DSP area. It is also possible that dewatering systems would be necessary for projects resulting from the DSP Update. The DSP area is primarily developed with existing urban uses and future development in the DSP area would be infill development and would not likely result in large excavation areas or large amounts of dewatering. Additionally, future development would not change large areas that are currently undeveloped and available for rainwater infiltration. Therefore, construction and operation of any potential development would have a minimal impact on groundwater in the area and would not substantially decrease groundwater supplies through substantial increases in impervious surfaces.

The proposed project would generate a water demand. The City no longer withdraws from the West Coast Groundwater Basin as a groundwater source as it receives its water from the West Basin Municipal Water District. West Basin purchases imported water from the Metropolitan Water District of Southern California and wholesales the imported water to cities and private companies in southwest Los Angeles County, including the City of El Segundo. Therefore, the project would not have the potential in decrease groundwater supplies from increase in demand. Therefore, project impacts related to groundwater supplies and recharge would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

c) i), ii), iii), iv) *Less than Significant Impact.*

There are no streams or rivers in the DSP area. The project could result in construction earthwork and grading that would expose soils. However, any project construction would occur in accordance with the requirements of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (Order No. 99-08)-DWQ) and the El Segundo Municipal Code Chapter 5-4. The El Segundo Municipal Code Chapter 5-4 specifies Best Management Practices (BMPs) that must be used during construction to prevent or reduce pollutant loading from stormwater or non-stormwater discharges to receiving waters. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. During operation, development in the DSP area would be required to control pollutants, pollutant loads, and runoff volume by: 1) minimizing the impervious surface area and 2) controlling runoff through infiltration, bioretention, and/or rainfall harvest and use. Compliance with existing regulations such as the National Pollutant Discharge Elimination System and the El Segundo Municipal Code Chapter 5-4, future development in the Specific Plan area would not significantly impact water quality, drainage patterns and runoff, or groundwater quality. The only area of the City located in a flood zone is the 0.8-mile frontage

along the Pacific Ocean, which is considered a Special Flood Hazard Area. The Specific Plan area is located approximately 1.0 mile east of the Pacific Ocean.

Therefore, project impacts related to erosion, siltation, increase in run-off, or impeding or redirecting flood flows would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

d) *Less than Significant Impact.*

The City, which includes the Specific Plan area, is located adjacent to the Pacific Ocean, which could create tsunamis. The Specific Plan area is located approximately 1.0 mile east of the Pacific Ocean. The tsunami hazard area does not extend into any part of the City that is developed. Development resulting from the Specific Plan Update would occur on previously developed sites in the City.

The City, which includes the Specific Plan area, does not contain large bodies of water that would be subject to seiche. Accordingly, impacts related to the risk from tsunamis or seiche would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

e) *Less than Significant Impact.*

As discussed above, the City would require implementation of the National Pollutant Discharge Elimination System (NPDES) General Construction Permit (Order No. 99-08)-DWQ and the El Segundo Municipal Code Chapter 5-4 for any project activities. Therefore, project construction and operation would not conflict with implementation of any water quality control plan. As discussed under b), construction and operation of the project would not substantially deplete groundwater supplies or interfere with groundwater recharge and would therefore not conflict with implementation of any groundwater management plan. Therefore, project impacts would be **less than significant** and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The City of El Segundo has a total land area of 5.4 square miles. The City of El Segundo is located in the southern portion of Los Angeles County, approximately 20 miles southwest of downtown Los Angeles. The City is bordered on the north by the Los Angeles International Airport; on the west by the Pacific Ocean; to the south by the City of Manhattan Beach; and to the east by the 405 Freeway. These barriers isolate El Segundo’s residential and downtown communities from other South Bay communities.

The Specific Plan area is in Downtown El Segundo, in the northwest quadrant of the City of El Segundo. The Specific Plan area is approximately 43.8 acres in size and is irregular in shape with portions extending to Eucalyptus Drive to the east, El Segundo Boulevard to the south, Concord Street to the west, and Mariposa Avenue to the north. The Specific Plan area is currently developed with a wide range of commercial, residential, and public uses.

Regulatory Setting

Regulations exist at state and local levels with regard to land use and include:

- California Planning and Zoning Law, Government Code Sections 65000 et seq.
- Southern California Association of Governments Connect SoCal Plan
- City of El Segundo General Plan
- City of El Segundo Municipal Code
- El Segundo Downtown Specific Plan

Checklist Discussion

a) No Impact.

The project is a revision to the existing El Segundo Downtown Specific Plan. Objectives of the Specific Plan Update would encourage and facilitate the redevelopment of underutilized sites within the Downtown area, including along primary transit corridors. Future development would be primarily infill both through redevelopment of an existing site or the development of higher density mixed use projects. As such, adoption of the Specific Plan Update would not physically divide an established community. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

b) *Potentially Significant Impact.*

The Specific Plan Update is subject to numerous regional and local land use plans, policies, and regulations as well as to the City of El Segundo Municipal Code, and requests several discretionary approvals including a General Plan Amendment and Zone Change. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be a value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

Petroleum resource development in the area was established with development of the refinery in 1911, prior to the City’s incorporation in 1917. The Specific Plan area is underlain by the El Segundo Oil Field,⁶ where over 14 million barrels of oil and condensate were produced locally between 1935 and 1992. Production has steadily declined since 1967.

Although there are several wells still operating in the City, there are no oil wells in operation within the Specific Plan area and the City is not shown as containing mineral resources.

Regulatory Setting

Regulations and responsible agencies exist at the state level with regard to mineral resources and include:

- Surface Mining and Reclamation Act of 1975
- Division of Oil, Gas, and Geothermal Resources
- Division of Mines and Geology

Checklist Discussion

a), b) No Impact.

No portion of the City, which includes the Specific Plan area, is delineated as a mineral resource or mineral resource recovery site in the City’s General Plan. There are no active mines or mineral resource extraction occurring in the City and all of the Downtown area is currently developed with land uses that are not related to mining or mineral extraction. Therefore, **no impacts** would occur, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

⁶ California Department of Conservation, Well Finder Map: <https://maps.conservation.ca.gov/doggr/wellfinder/#openModal/-118.40111/33.91899/15>. Accessed December 2022.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Generation of excessive groundborne vibration or groundborne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 2 miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Noise Fundamentals

Sound is described in terms of amplitude (i.e., loudness) and frequency (i.e., pitch). The standard unit of sound amplitude measurement is the decibel (dB). The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted dB scale (dBA) provides this compensation by emphasizing frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound audible at such a level that the sound becomes an undesirable by-product of society’s normal day-to-day activities. Sound becomes unwanted when it interferes with normal activities, causes actual physical harm, or results in adverse health effects. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);
- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

The definition of noise as unwanted sound implies that it has an adverse effect, or causes a substantial annoyance, to people and their environment. However, not every unwanted audible sound interferes with normal activities, causes harm, or has adverse health effects. For unwanted audible sound (i.e., noise) to be considered adverse, it must occur with sufficient frequency and at such a level that these adverse impacts are reasonably likely to occur.

Vibration Fundamentals

Vibration can result from a source (e.g., train operations, motor vehicles, machinery equipment, etc.) causing the adjacent ground to move and creating vibration waves that propagate through the soil to the foundations of nearby buildings. This effect is referred to as groundborne vibration. The peak particle velocity (PPV) or the root mean square (RMS) velocity is usually used to describe vibration levels. PPV is defined as the maximum instantaneous peak of the vibration level, while RMS is defined as the square root of the average of the squared amplitude of the vibration level. PPV is typically used for evaluating potential building damage, while RMS velocity in decibels (VdB) is typically more suitable for evaluating human response.

Environmental Setting

Noise in the Specific Plan area comes from transportation sources, including highways, arterials, and roadways; Los Angeles International Airport; and non-transportation sources, such as commercial activities and various community activities. The City is also bounded to the north by Imperial Highway, which is located approximately 1.0 mile north of the Specific Plan area. The noise environment in the Specific Plan area is dominated by airport and vehicular traffic including vehicular generated noise along Imperial Highway and other primary and secondary arterials. In addition, a number of other sources contribute to the total noise environment. These noise sources include construction activities, power tools and gardening equipment, loudspeakers, auto repair, radios, children playing and dogs barking.

Regulatory Setting

Various private and public agencies have established noise guidelines and standards to protect citizens from potential hearing damage and other adverse physiological and social effects associated with noise. Federal, state, regional, and local guidelines and include the following:

- Federal Transit Administration and Federal Railroad Administration Standards
- Federal Aviation Administration Standards
- California Noise Control Act
- California Code of Regulations
- City of El Segundo General Plan
- City of El Segundo Municipal Code

Checklist Discussion

a), b) *Potentially Significant Impact.*

Dependent on the distance and intensity of equipment used for any future projects in the Specific Plan area, there could be project specific noise and vibration impacts associated with construction of future projects. Furthermore, future development would involve demolition, site preparation, grading, building construction, and paving activities that could generate noise and groundborne vibration during the temporary construction period. Therefore, there could be a substantial temporary increase in ambient noise levels and groundborne vibration in the vicinity of the Specific Plan area during project construction. In addition, new vehicles trips generated by operation of new development could potentially result in increased traffic noise levels in the project vicinity that could exceed the applicable noise standards.

Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

c) *Less Than Significant Impact.*

Los Angeles International Airport is located approximately 1.0 mile north of the Specific Plan area's northern border across Imperial Highway. The Los Angeles County Airport Land Use Commission (ALUC) prepared the Los Angeles County Airport Land Use Plan (ALUP), revised on December 1, 2004. The ALUP provides for the orderly expansion of Los Angeles County's public use airports and the areas surrounding them. It is also intended to provide for the adoption of land use measures that minimize the public's exposure to excessive noise and safety hazards. In formulating the ALUP, the Los Angeles County ALUC established provisions for safety, noise insulation, and the regulation of building height in areas adjacent to each of the county's public airports.

The project is a revision to the existing El Segundo Downtown Specific Plan. As all areas of the Specific Plan area are essentially built-out, all future development would be infill and/or replacement of existing uses. As future development would only occur on sites currently or previously developed, impacts resulting from construction of new development would be similar as under current conditions.

Therefore, neither adoption of the Specific Plan Update nor any future development within the Specific Plan area would result in potential impacts associated with airport noise that do not currently exist. Therefore, impacts would be **less than significant**, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with the Incorporated Mitigation	Less Than Significant Impact	No Impact
14. 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)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

According to 2020 Department of Finance (DOF) estimates, the City has a total of 7,500 dwelling units.⁷ As of 2020, the DOF determined that the City's population numbered 17,298.⁸

Regulatory Setting

Regulations and plans exist at state, regional, and local levels related to populations and housing and include:

- California Government Code Section 65583 and 65584(a)(1)
- Senate Bill 375
- Southern California Association of Governments Connect SoCal
- Regional Housing Needs Assessment

Checklist Discussion

a) Potentially Significant Impact.

The project is a revision to the existing El Segundo Downtown Specific Plan. The proposed DSP update would include development standards, including building form, massing, and articulation standards that would increase building heights, reduce or eliminate stepbacks, and allow additional residential and office use at higher densities. Density would be increased on sites within the DSP area through a form-based approach. Objectives of the Specific Plan Update would encourage and facilitate the redevelopment of underutilized sites within the Downtown area, including along primary transit corridors. Thus, the Specific

⁷ State of California Department of Finance, Table E-5 Population and Housing Estimates for Cities, Counties and the State, 2020-2022, website: <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>. Accessed December 2022.

⁸ State of California Department of Finance, Table E-5 Population and Housing Estimates for Cities, Counties and the State, 2020-2022, website: <https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2022/>. Accessed December 2022.

Plan Update could generate new residents as well as employees. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

b) *Potentially Significant Impact.*

A significant impact may occur if a project would result in displacement of existing housing units, including people within occupied housing units, necessitating construction of replacement housing elsewhere. As the objectives of the Specific Plan Update would encourage and facilitate the redevelopment of underutilized sites within the Downtown area to accommodate anticipated future market demand, the implementation of the Specific Plan Update could result in displacement. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. PUBLIC SERVICES. 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:				
a) Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Schools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Parks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Fire Protection

The El Segundo Fire Department (ESFD) provides fire protection and emergency medical services in the City. The ESFD maintains 14 firefighters on duty 24 hours a day, 7 days a week. The City has two fire stations: Fire Station 1, located at 314 Main Street and Fire Station 2, located at 2261 E. Mariposa Avenue. Fire Station 1 houses ESFD headquarters and six fighters responding on Engine 31, Rescue 31 and Battalion 31. Additionally, Fire Administration, Fire Prevention and Environmental Safety personnel work out of Fire Station 1, making it an important facility for fire and medical response, as well as other business services related to the Fire Department. Fire Station 2 has eight firefighters respond out of the station and staff Engine 32, Truck 32 and Rescue 32.⁹ The City is divided into two districts for fire response, with Pacific Coast Highway as the dividing line. Station 1 responds to calls west of Pacific Coast Highway and Station 2 responds east of Pacific Coast Highway. Depending on the nature of the emergency request, units may cross over into the other district and coordinate resources to assist in response activities.

Police Protection

The El Segundo Police Department (ESPD) provides police protection in the City. The department’s headquarters are located at 348 Main Street at the Civic Center Complex. The ESPD has an Administrative Services Bureau and a Field Operations Bureau. The Administrative Bureau manages multiple Divisions in the ESPD, including investigative, administrative, training, police property, crime scene investigations, community engagement, personnel division, and police records.¹⁰ The Field Operations Bureau consists of the Patrol Division and the Special Operations Division.¹¹ The City is divided into two geographic patrol

⁹ *El Segundo Fire Department, Operations, website: <https://www.elsegundofd.org/suppression/operations>. Accessed December 2022.*

¹⁰ *El Segundo Police Department, Bureaus, website: <https://www.elsegundopd.org/about-espdp/bureaus>. Accessed December 2022.*

¹¹ *El Segundo Police Department, Bureaus, website: <https://www.elsegundopd.org/about-espdp/bureaus>. Accessed December 2022.*

areas bisected by Pacific Coast Highway. The area west of Pacific Coast Highway is designated the West Command and the area east of Pacific Coast Highway is designated the East Command.¹²

Schools

Schools in the City are administered by the El Segundo Unified School District, which provides kindergarten through twelfth grade public education services in El Segundo. Based on information in the school district's Board of Education Goals for Our Future: 2020-2040, the District does not have any issues with capacity or inadequate facilities.¹³

State Assembly Bill (AB) 2926 authorized school districts to assess all new development a fee to offset impacts proposed projects might have on the school facilities. Whenever possible, the Districts have requested that developers provide full impact mitigation on development. The establishment of special tax districts, full cost recovery agreements or the provision of relocatable classrooms in lieu of fees are just a few examples of such mitigation measures.

Parks

The City of El Segundo's Community Services Department includes the Parks and Facilities division, which is responsible for the developed parkland in the City. The City provides a wide variety of attractions and amenities including more than 26 recreational facilities, including 15 parks, athletic fields, recreational water amenities, a skate park, dog park and community garden. Additionally, the Department provides the recreation classes, special events, sports league information, older adult social activities, youth drama auditions and performance dates and performs landscape and tree maintenance year-round, provides public transportation, volunteer opportunities and community service programs. Additionally, the City owns the Lakes at El Segundo, an executive nine-hole golf course and two-story lighted driving range, complete with a pro shop, cafe and banquet facilities.¹⁴ Per the City's Rec and Parks Department, the City's parks currently provide approximately 3.5 acres of park space per 1,000 residents, which is within the State of California Parks Department standard of 3.0 acres per 1,000 residents.

Other Public Facilities

The City has one library, the El Segundo Public Library, located at 111 West Mariposa Avenue. In addition to printed materials, the Library has a digital library, history room, photo archives, event rooms, and a cultural development program.¹⁵ On November 19, 2019, the El Segundo City Council adopted Ordinance 1594 establishing a Public Art or In-Lieu Fee Requirement and a Cultural Development Fund. The requirement applies to certain commercial and industrial developments with a project cost exceeding \$2,000,000.

¹² El Segundo Police Department, Patrol, website: <https://www.elsegundopd.org/patrol>. Accessed December 2022.

¹³ El Segundo Unified School District, District Goals, website: <https://www.elsegundousd.net/page/district-goals>. Accessed December 2022.

¹⁴ El Segundo Rec, Parks & Library, Parks & Facilities Directory, website: <https://www.elsegundorecparks.org/parks-facilities/parks-facilities-directory>. Accessed December 2022.

¹⁵ El Segundo Public Library, website: <https://www.elsegundolibrary.org/home-library>. Accessed December 2022.

Regulatory Setting

Regulations and policies exist the state and local level with regard to public services and include:

- California Mutual Aid Plan
- Senate Bill 50
- Quimby Act and Assembly Bill 1359
- City of El Segundo General Plan

Checklist Discussion

a) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Implementation of the Specific Plan Update could result in new development in the Downtown area that would increase the density of residential, office, medical office, retail and restaurant uses, requiring, fire and emergency services, thereby, increasing the overall number of emergency calls to the El Segundo Fire Department. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

b) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Implementation of the Specific Plan Update could result in new development in the Downtown area of residential, office, medical office, retail and restaurant uses, requiring, police services, thereby, increasing the overall number of emergency calls to the El Segundo Police Department. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

c) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. The Specific Plan area is located within the El Segundo Unified School District boundaries and would generate students who would attend the schools in this district. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

d) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Impacts would increase to existing and proposed recreational facilities, from the additional population from new development in the Specific Plan area. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

e) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Impacts would increase to existing library facilities from the additional population from new development in the Specific Plan area. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. RECREATION. Would the project:				
a) 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

The City of El Segundo's Community Services Department includes the Parks and Facilities division, which is responsible for the developed parkland in the City. The City provides a wide variety of attractions and amenities including more than 26 recreational facilities, including 15 parks, athletic fields, recreational water amenities, a skate park, dog park, and community garden. Additionally, the Department provides the recreation classes, special events, sports league information, older adult social activities, youth drama auditions and performance dates and performs landscape and tree maintenance year-round, provides public transportation, volunteer opportunities and community service programs.¹⁶ Per the City’s Rec and Parks Department, the City’s parks currently provide approximately 3.5 acres of park space per 1,000 residents, which is within the State of California Parks Department standard of 3.0 acres per 1,000 residents.

Regulatory Setting

Regulations and policies exist the state and local level with regard to recreation and include:

- California Mutual Aid Plan
- Senate Bill 50
- Quimby Act and Assembly Bill 1359
- City of El Segundo General Plan

Checklist Discussion

a), b) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan, which would potentially increase development and thereby residential and visitor uses of City recreational facilities. This increase in use has the potential to create impacts to existing recreational facilities from additional population

¹⁶ *El Segundo Rec, Parks & Library, Parks & Facilities Directory, website: <https://www.elsegundorecparks.org/parks-facilities/parks-facilities-directory>. Accessed December 2022.*

from new and denser development in the Specific Plan area. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. TRANSPORTATION. Would the project:				
a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit roadway, bicycle and pedestrian facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Existing Street System

Regional access to the City, which includes the Specific Plan area, is provided by the Glenn Anderson Freeway (I-105), the San Diego Freeway (I-405), Pacific Coast Highway (CA-1) and Imperial Highway. Local access within the City is provided by several major streets, including Aviation Boulevard, Douglas Street, Nash Street, Continental Boulevard, Pacific Coast Highway, Washington Street, California Street, Center Street, Sheldon Street, Main Street, Virginia Street, Vista Del Mar, Imperial Avenue, Maple Avenue, Mariposa Avenue, Grand Avenue, El Segundo Boulevard, and Rosecrans Avenue. Major streets serving the study area include Pacific Coast Highway and Aviation Boulevard in the north-south direction.

Transit Service

The City, which includes the Specific Plan area, is served by a variety of public transit options, including local and regional bus lines, as well as the LA Metro rail system. The Metro 125 and Metro 232 local bus routes contains multiple stops on Rosecrans Avenue, Pacific Coast Highway, Grand Avenue, and other adjoining major streets in the City. Torrance Transit (Route 8), Beach Cities Transit Line (Route 109), and Metro Rail C (Green) Line also serves the area.

Existing Bicycle and Pedestrian Facilities

The City of El Segundo provides marked, Class-II bicycle lanes along Rosecrans Avenue west of Pacific Coast Highway, Grand Avenue west of the Downtown Specific Plan area, and Imperial Highway. The City contains a mature network of streets and extensive pedestrian facilities, including sidewalks, crosswalks, and pedestrian safety features. Approximately 10- to 16-foot sidewalks are provided on arterials throughout the City. Narrower sidewalks are present on most collector and local streets in the City.

Regulatory Setting

Regulations and policies exist at the state, regional, and local levels as follows:

- Senate Bill 743
- CEQA Guidelines Section 15064.71
- South Bay Bicycle Master Plan
- City of El Segundo General Plan Circulation Element

Checklist Discussion**a) *Potentially Significant Impact.***

The project is a revision to the existing El Segundo Downtown Specific Plan. Implementation of the Specific Plan Update could result in an increase in new development in the Downtown area of residential, office, medical office, retail and restaurant uses beyond what currently exists. This new development would require the use of a variety of construction vehicles throughout construction. Typical construction schedules create trips outside of the traffic peak hours. It is anticipated that there would be no hauling during the PM peak hour, and that construction workers would arrive at project sites prior to the AM peak hour, which is typical construction industry practice.

Operation of new development in the Specific Plan area could generate new residents on-site in addition to on-site employees and patrons of the commercial spaces, which would result in increased vehicle trips on area roadways that could degrade the existing performance levels of roadway facilities. The project-generated population could also increase the demand for and use of public transit, which may affect the performance of existing transit conditions in the area. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

b) *Potentially Significant Impact.*

The Specific Plan Update could involve the addition of residential, office, medical office, retail and restaurant uses to the Specific Plan area. Implementation of the Specific Plan Update could result in temporary impacts to the circulation system. In addition, the Specific Plan Update could increase development intensity which could result in increased vehicle trips on area roadways and associated VMT. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

c) *Less Than Significant Impact.*

The Specific Plan Update does not include any specific development of land. Any new development proposed under the Specific Plan Update would require that access locations be designed to City standards and to provide adequate sight distance, sidewalks, crosswalks, and pedestrian movement controls that meet the City's requirements to protect pedestrian safety. Street trees and other potential impediments to adequate driver and pedestrian visibility would be required to be minimal and the City would require that pedestrian entrances separated from vehicular driveways provide access from the adjacent streets. As a result, the Specific Plan Update would not substantially increase hazards or conflicts due to a geometric design feature, or result in inadequate emergency access. Therefore, implementation

of the Specific Plan Update would have a **less than significant impact**, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

d) *Less Than Significant Impact.*

Projects proposed pursuant to the Specific Plan Update would be reviewed to ensure that new development would be subject to provisions within the City's Fire Code regarding emergency access. Likewise, any new development would be subject to the City Fire Code requirements and Fire Department conditions of approval.

Construction activities have the potential to temporarily impact traffic and vehicle speeds on adjacent roadways; however, these impacts would be temporary and emergency access to roadways, would not be blocked by project construction. Furthermore, project applicants would coordinate with the City to ensure appropriate construction staging areas and adequate emergency vehicle access to project sites and adjacent roadways are maintained throughout construction periods.

The Specific Plan Update could include construction of new buildings consisting of residential, office, medical office, retail and restaurant uses. As required by the El Segundo Fire Department, future projects would be designed to accommodate emergency access, including police and fire access. Additionally, applicants would submit a Fire/Life Safety Plan that includes emergency site access during project construction, permanent Fire Department access during operation, the locations of fire hydrants and sprinkler systems, and fire alarm system specifications prior to issuance of building permits for a project. Therefore, the Specific Plan Update would not result in inadequate emergency access during project construction and operation and impacts would be **less than significant**, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>18. TRIBAL CULTURAL RESOURCES. Consultation with a California Native American tribe that has requested such consultation may assist a lead agency in determining whether the project may adversely affect tribal cultural resources, and if so, how such effects may be avoided or mitigated. Whether or not consultation has been requested, would the project cause a substantial adverse change in a site, feature, place, cultural landscape, sacred place, or object, with cultural value to a California Native American tribe, which is any of the following:</p>				
<p>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, 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:</p>				
<p>i) 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), or</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>ii) 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 Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Assembly Bill 52 (AB 52, Gatto. Native Americans: California Environmental Quality Act) and CEQA Public Resources Code Section 21080.31, subdivisions (b), (d)), requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project.

California Government Code Section 65352.3 (adopted pursuant to the requirements of Senate Bill (SB) 18) requires local governments to contact, refer plans to, and consult with tribal organizations prior to making a decision to adopt or amend a general or specific plan, or to designate open space that includes Native American Cultural Places. The tribal organizations eligible to consult have traditional lands in a local government’s jurisdiction, and are identified, upon request, by the Native American Heritage Commission (NAHC). As noted in the California Office of Planning and Research’s Tribal Consultation Guidelines (2005), “the intent of SB 18 is to provide California Native American tribes an opportunity to participate in local land use decisions at an early planning stage, for the purpose of protecting, or mitigating impacts to cultural places.”

Regulatory Setting

The regulation that guides the consideration and treatment of tribal cultural resources is:

- Assembly Bill 52
- Senate Bill 18

Checklist Discussion

a) i), *Potentially Significant Impact.*

AB 52, signed into law on September 25, 2014, requires lead agencies to evaluate a project’s potential to impact Tribal Cultural Resources (TCR) and establishes a formal notification and, if requested, consultation process for California Native American Tribes as part of CEQA. TCR includes sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register or included in a local register of historical resources. AB 52 also gives lead agencies the discretion to determine, supported by substantial evidence, whether a resource qualifies as a TCR. Consultation is required upon request by a California Native American tribe that has previously requested that the City provide it with notice of such projects, and that is traditionally and culturally affiliated with the geographic area of a project. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

a) ii), *Potentially Significant Impact.*

Under AB 52, if a lead agency determines that a project may cause a substantial adverse change to a TCR, the lead agency must consider measures to mitigate that impact. PRC Section 21074 provides a definition of a TCR. In brief, in order to be considered a TCR, a resource must be either: 1) listed, or determined to be eligible for listing, on the national, State, or local register of historic resources, or 2) a resource that the lead agency chooses, in its discretion supported by substantial evidence, to treat as a TCR. In the latter instance, the lead agency must determine that the resource meets the criteria for listing in the State register of historic resources or City Designated Cultural Resource. In applying those criteria, a lead agency shall consider the value of the resource to the tribe. As mentioned above, a TCR includes sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are eligible for inclusion in the California Register, are included in a local register of historical resources, or are otherwise determined by the lead agency to be significant based on substantial evidence. A substantial adverse change to a TCR is a significant effect on the environment under CEQA. Because future projects in the Specific Plan area could include excavation to depths not previously disturbed, and given that the AB 52 Tribal notification/consultation process has not been completed to date, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
19. 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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Environmental Setting

Water

Water service in the City, which includes the Specific Plan area, is provided by the City of El Segundo's Water Division, which is a partner of the West Basin Municipal Water District (WBMWD). The WBMWD provides wholesale potable water to 17 cities, serving approximately 900,000 people. According to the West Basin Municipal Water District's 2020 Urban Water Management Plan (UWMP), which is updated every five years, water supply in the City in 2020 consists of: 15 to 20% groundwater; 65% imported water; and 17% recycled water.¹⁷

Wastewater

Wastewater in the City, which includes the Specific Plan area, is treated by the Sanitation District of Los Angeles County (the Sanitation District) at two facilities: the Hyperion Treatment Plant (HTP) and the Joint Water Pollution Control Plant (JWPCP). The City of El Segundo has an agreement with the City of Los

¹⁷ West Basin Municipal Water District 2020 Urban Water Management Plan, June 2021.

Angeles that permits an average flow of 2.75 million gallons per day of wastewater treatment and disposal capacity. Before discharge, the treated wastewater is disinfected with hypochlorite and sent to the Pacific Ocean through a network of outfalls. These outfalls extend two miles off the Palos Verdes Peninsula to a depth of 200 feet. The JWPCP must comply with its current National Pollutant Discharge Elimination System (NPDES) Permit, which regulates the plant's discharges. The City has a System Evaluation and Capacity Assurance Plan and Rehabilitation and Replacement Program that evaluates the City's existing sewer system and recommends improvements to the system to serve the City's future needs.

Senate Bill 1087 also mandates priority sewage collection and treatment service to housing developments providing units affordable to lower-income households.

Dry Utilities

Southern California Edison (SCE) and Southern California Gas Company (SoCalGas) provide electricity and natural gas services in the City, which includes the Specific Plan area.

Solid Waste

Solid waste disposal in the City, which includes the Specific Plan area, is provided by EDCO, a private company. EDCO provides residential and commercial pickup, including green waste disposal, recycling, and bulky item pickup. In 2011, AB 341 was adopted establishing a policy goal that 75% of statewide solid waste should be reduced, recycled, or composted by 2020. This is an expansion of previous state goals to divert 50% of community-wide waste. This measure complies with state goals of waste reduction.

Checklist Discussion

a), b), c), d), e) *Potentially Significant Impact.*

The project is a revision to the existing El Segundo Downtown Specific Plan. Given the built-out character of El Segundo, most areas are already served with water and wastewater infrastructure and solid waste services. Existing water delivery, wastewater collection infrastructure and solid waste disposal is available to all properties located in the Downtown area.

The Specific Plan Update could increase the construction and operation of new development in the Downtown area comprised of residential, office, medical office, retail and restaurant uses, which could potentially increase demand for electricity, natural gas, and water, as well as increased generation of solid waste and wastewater compared to existing conditions. The Specific Plan Update could also require upgrades to the existing utilities. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
20. WILDFIRE: 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Environmental Setting

The City of El Segundo, which includes the Specific Plan area, is completely developed with urban uses and is not located in a Very High Fire Hazard Severity Zone. The closest State-designated fire hazard zone is at the Ballona Wetlands, more than 6.5 miles north from the Specific Plan area and open space areas around the Inglewood Oil Fields and Kenneth Hahn State Recreation Area, more than nine miles north from the Specific Plan area. Both Very High Fire Hazard Severity Zones are separated from the Specific Plan area by urbanized development, including Los Angeles International Airport and I-405.

Regulatory Setting

Regulations exist at federal, state, and local levels with regard to wildfire include:

- Los Angeles County 2019 All-Hazards Mitigation Plan
- City of El Segundo General Plan

Checklist Discussion

a), b), c), d) *No Impact.*

According to CALFire, the City, which includes the Specific Plan area, is not located in a Very High Fire

Hazard Severity Zone.¹⁸ The closest State-designated fire hazard zone is at the Ballona Wetlands, more than 6.5 miles north from the Specific Plan area and open space areas around the Inglewood Oil Fields and Kenneth Hahn State Recreation Area, more than nine miles north from the Specific Plan area.

Future development within the Specific Plan area would not be subject to any more risk than other development in the City not located within a Very High Fire Hazard Severity Zone. Furthermore, future development would be required to comply with applicable codes, regulations, and standard measures for fire protection. Developers would be required to provide proof of compliance with applicable building and fire code requirements, as well as El Segundo Fire Department Plan Check requirements. These requirements include, but are not limited to, items such as types of roofing materials, building construction, fire hydrant flows, hydrant spacing, access and design, fire sprinkler systems, and other hazard reduction programs such as the Fire/Life Safety Plan, as set forth by the El Segundo Fire Department and the Uniform Fire Code. Therefore, there would be **no impact** related to wildfire and emergency response or evacuation plans, exposure to pollutant concentrations, exacerbated fire risk, or flooding or landslides as a result of post-fire slope instability, and no mitigation measures are required. No further evaluation of this topic is required in the Programmatic EIR.

¹⁸ Cal Fire, State Responsibility Area Viewer, website: <https://calfire-forestry.maps.arcgis.com/apps/webappviewer/index.html?id=468717e399fa4238ad86861638765ce1>. Accessed: December 2022.

	Potentially Significant Impact	Less Than Significant Impact with Mitigation Incorporated	Less Than Significant Impact	No Impact
21. MANDATORY FINDINGS OF SIGNIFICANCE. Would the project:				
a) Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Checklist Discussion

a) Potentially Significant Impact.

In Section 4, Biological Resources, it was found that implementation of the Specific Plan Update would not substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or substantially reduce the number or restrict the range of a rare or endangered plant or animal. Potential impacts to fish, wildlife, and plants would be **less than significant**.

As discussed in Section 5, Cultural Resources, Section 7, Geology and Soils, and Section 18, Tribal Cultural Resources, there is the **potential for impacts** to historic resources, and previously undiscovered archaeological, paleontological, and tribal cultural resources. Therefore, these issues will be analyzed in detail in a Programmatic EIR.

b) Potentially Significant Impact.

As discussed in Sections 1 through 20, above, the Specific Plan Update may result in significant impacts to aesthetics, air quality, cultural resources, energy, GHG emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, transportation, tribal cultural resources, and utilities. Potential cumulative impacts in these issue areas, for which **potentially significant impacts** have been identified, will be analyzed in detail in a Programmatic EIR.

c) ***Potentially Significant Impact.***

In general, impacts to human beings are associated with air quality, GHG emissions, hazards and hazardous materials, and noise. As discussed in Section 3, Air Quality, Section 8, Greenhouse Gas Emissions, Section 9, Hazards and Hazardous Materials, and Section 13, Noise, impacts related to these issue areas could potentially be significant. Therefore, the Specific Plan Update could potentially have harmful environmental effects that could affect humans either directly or indirectly. Therefore, this issue could be a **potentially significant impact** and will be further evaluated in detail in the Programmatic EIR.

APPENDIX A.3: NOP PUBLIC COMMENTS

NATIVE AMERICAN HERITAGE COMMISSION

January 18, 2023

Paul Samaras
City of El Segundo
350 Main Street
El Segundo, CA 90245

Re: 2023010196, El Segundo Downtown Specific Plan Project, Los Angeles County

Dear Mr. Samaras:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, § 15064.5 (b) (CEQA Guidelines § 15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines § 15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements.** If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52



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AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

- 1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project:** Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:

 - a. A brief description of the project.
 - b. The lead agency contact information.
 - c. Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
 - d. A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

- 2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report:** A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).

 - a. For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

- 3. Mandatory Topics of Consultation If Requested by a Tribe:** The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:

 - a. Alternatives to the project.
 - b. Recommended mitigation measures.
 - c. Significant effects. (Pub. Resources Code §21080.3.2 (a)).

- 4. Discretionary Topics of Consultation:** The following topics are discretionary topics of consultation:

 - a. Type of environmental review necessary.
 - b. Significance of the tribal cultural resources.
 - c. Significance of the project's impacts on tribal cultural resources.
 - d. If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

- 5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process:** With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

- 6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document:** If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:

 - a. Whether the proposed project has a significant impact on an identified tribal cultural resource.
 - b. Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

- 7. Conclusion of Consultation:** Consultation with a tribe shall be considered concluded when either of the following occurs:
- a.** The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
 - b.** A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).
- 8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document:** Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).
- 9. Required Consideration of Feasible Mitigation:** If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).
- 10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:**
- a.** Avoidance and preservation of the resources in place, including, but not limited to:
 - i.** Planning and construction to avoid the resources and protect the cultural and natural context.
 - ii.** Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
 - b.** Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
 - i.** Protecting the cultural character and integrity of the resource.
 - ii.** Protecting the traditional use of the resource.
 - iii.** Protecting the confidentiality of the resource.
 - c.** Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
 - d.** Protecting the resource. (Pub. Resource Code §21084.3 (b)).
 - e.** Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
 - f.** Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).
- 11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource:** An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
- a.** The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
 - b.** The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
 - c.** The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalePAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. **Tribal Consultation**: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. **No Statutory Time Limit on SB 18 Tribal Consultation**. There is no statutory time limit on SB 18 tribal consultation.
3. **Confidentiality**: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. **Conclusion of SB 18 Tribal Consultation**: Consultation should be concluded at the point in which:
 - a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
 - b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: <http://nahc.ca.gov/resources/forms/>.

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (https://ohp.parks.ca.gov/?page_id=30331) for an archaeological records search. The records search will determine:
 - a. If part or all of the APE has been previously surveyed for cultural resources.
 - b. If any known cultural resources have already been recorded on or adjacent to the APE.
 - c. If the probability is low, moderate, or high that cultural resources are located in the APE.
 - d. If a survey is required to determine whether previously unrecorded cultural resources are present.
2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
 - a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
 - b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
 - a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
 - b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
 - a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, § 15064.5(f) (CEQA Guidelines § 15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
 - b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
 - c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code § 7050.5, Public Resources Code § 5097.98, and Cal. Code Regs., tit. 14, § 15064.5, subdivisions (d) and (e) (CEQA Guidelines § 15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address:
Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Cultural Resources Analyst

cc: State Clearinghouse



523 West Sixth Street, Suite 826
Los Angeles, CA 90014

213 623 2489 OFFICE
213 623 3909 FAX
laconservancy.org

February 13, 2023

Submitted Electronically

Paul Samaras
City of El Segundo Planning Division
350 Main Street
El Segundo, CA 90245
Email: psamaras@elsegundo.org

RE: Notice of Preparation of a Draft Environmental Impact Report for the Proposed El Segundo Downtown Specific Plan Update, SCH 2023010196

Dear Paul Samaras:

On behalf of the Los Angeles Conservancy, I am writing to comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the proposed El Segundo Downtown Specific Plan (DSP) Update. The proposed update is a revision to the existing El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the DSP area. The project would revise the existing DSP planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. Additionally, it would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

As noted in the DSP Update's Initial Study (IS) the plan would cause potentially significant impacts to the project area's cultural resources. The following are some of the ways the City might mitigate those impacts.



I. Update the 2014 historic resources survey and historic context statement as part of the project

As a means to preserve the character of El Segundo's downtown area, the Conservancy recommends the City of El Segundo update the 2014 historic resources survey, which the City conducted at the time of the previous DSP to capture any properties that may have gained significance during the previous nine years.

As a companion to the survey historic context statements provide a framework for identifying and evaluating historic resources within the survey area. The context is a narrative that may cover themes including architectural, social, ethnic, and cultural topics. Contexts are a powerful tool for future landmark designations at the local, state, and national levels.

Recommendation: Update the existing Downtown historic resources survey to reflect current conditions and complete a historic context statement to provide a framework for identifying and evaluating historic resources within the survey area.

II. Incorporate stronger language that promotes historic preservation into the proposed DSP Update

As noted in the proposed project's Initial Study (IS), there are two distinct districts within the project area. These are the Main Street District and the Richmond Street District. Both districts contain some of the city's oldest commercial buildings in the city, including the Old Town Music Hall. The Conservancy appreciates the proposed land use updates that would celebrate the historic nature of the area and guidelines maintaining the existing scale, massing, and character of the area. In addition to these policies, we encourage the city to incorporate language promoting the preservation of historic buildings so the historic resources that contribute to the character of downtown are not razed for new construction.

Recommendation: Incorporate language within the DSP Update that emphasizes historic preservation.

III. Creation of a legacy businesses program

Beyond the physical built environment, the City of El Segundo should look at developing a legacy business program for the historic downtown commercial area. Legacy businesses are long-standing neighborhood anchors that contribute to a sense of place. Often 20 years of operation is the minimum threshold for a legacy business.



In recent years, cities including San Francisco, San Antonio, Los Angeles, and Long Beach have adopted programs that either provide financial incentives or create a promotional program that attracts patrons. The Conservancy played an important role in the formation of the City of Los Angeles's program and would be interested in discussing such a program with the City of El Segundo.

IV. Meeting with the City's project team

Lastly, the Conservancy would appreciate the opportunity to meet with the City of El Segundo's project team to discuss the impacts of the DSP Update on historic resources and ways the City might mitigate those impacts through a historic resources survey and creation of a legacy business program among others. We regularly work with cities across the county to find win-win outcomes to historic preservation issues.

In summary, the Conservancy recommends the following as potential ways to mitigate any significant impacts to historic resources.

- Update existing historic resources survey and context statement
- Incorporate language that promotes historic preservation
- Creation of a legacy business program

About the Los Angeles Conservancy:

The Los Angeles Conservancy is the largest local historic preservation organization in the United States, with nearly 5,000 members throughout the Los Angeles area. Established in 1978, the Conservancy works to preserve and revitalize the significant architectural and cultural heritage of Los Angeles County through advocacy and education.

Please do not hesitate to contact me at (213) 430-4203 or afine@laconservancy.org should you have any questions or concerns.

Sincerely,



Adrian Scott Fine
Senior Director of Advocacy





**LOS ANGELES COUNTY
SANITATION DISTRICTS**
Converting Waste Into Resources

Robert C. Ferrante
Chief Engineer and General Manager

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
(562) 699-7411 • www.lacsd.org

January 31, 2023

Ref. DOC 6807280

Mr. Paul Samaras
City of El Segundo
Community Development Department
350 Main Street
El Segundo, CA 90245

Dear Mr. Samaras:

NOP Response to El Segundo Downtown Specific Plan Update

The Los Angeles County Sanitation Districts (Districts) received a Notice of Preparation (NOP) of a Draft Environmental Impact Report for the subject project on January 13, 2023. We offer the following comments regarding sewerage service:

- **Section 19 Utilities and Service Systems, *Environmental Setting*, pages II-66 and II-67:** the first paragraph under the Wastewater subsection stated that “Wastewater in the City, which includes the Specific Plan area, is treated by the Sanitation District of Los Angeles County (the Sanitation District) at two facilities: the Hyperion Treatment Plant (HTP) and the Joint Water Pollution Control Plant (JWPCP).” Please note that the Districts does not own the Hyperion Treatment Plant. While a portion of wastewater generated within the City of El Segundo is treated at the Districts’ JWPCP, wastewater generated by the proposed project will be treated by the City of Los Angeles’ Hyperion Treatment System. Questions regarding sewerage service for the proposed project should be directed to the City of Los Angeles’ Department of Public Works.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2743, or mandyhuffman@lacsd.org.

Very truly yours,

Mandy Huffman

Mandy Huffman
Environmental Planner
Facilities Planning Department

MNH:mnh



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA E-MAIL:

psamaras@elsegundo.org

Paul Samaras, Principal Planner
City of El Segundo
Community Development Department
350 Main Street
El Segundo, California 90245

January 30, 2023

Notice of Preparation of a Draft Programmatic Environmental Impact Report for the El Segundo Downtown Specific Plan Update

South Coast Air Quality Management District (South Coast AQMD) staff appreciates the opportunity to comment on the above-mentioned document. Our comments are recommendations on the analysis of potential air quality impacts from the Proposed Project that should be included in the Programmatic Environmental Impact Report (PEIR). Please send a copy of the PEIR upon its completion and public release directly to South Coast AQMD as copies of the PEIR submitted to the State Clearinghouse are not forwarded. **In addition, please send all appendices and technical documents related to the air quality, health risk, and greenhouse gas analyses and electronic versions of all emission calculation spreadsheets, and air quality modeling and health risk assessment input and output files (not PDF files). Any delays in providing all supporting documentation for our review will require additional review time beyond the end of the comment period.**

CEQA Air Quality Analysis

Staff recommends that the Lead Agency use South Coast AQMD's CEQA Air Quality Handbook and website¹ as guidance when preparing the air quality and greenhouse gas analyses. It is also recommended that the Lead Agency use the CalEEMod² land use emissions software, which can estimate pollutant emissions from typical land use development and is the only software model maintained by the California Air Pollution Control Officers Association.

South Coast AQMD has developed both regional and localized significance thresholds. South Coast AQMD staff recommends that the Lead Agency quantify criteria pollutant emissions and compare the emissions to South Coast AQMD's CEQA regional pollutant emissions significance thresholds³ and localized significance thresholds (LSTs)⁴ to determine the Proposed Project's air quality impacts. The localized analysis can be conducted by either using the LST screening tables or performing dispersion modeling.

The Lead Agency should identify any potential adverse air quality impacts that could occur from all phases of the Proposed Project and all air pollutant sources related to the Proposed Project. Air quality impacts from both construction (including demolition, if any) and operations should be calculated. Construction-related air quality impacts typically include, but are not limited to, emissions from the use of

¹ South Coast AQMD's CEQA Handbook and other resources for preparing air quality analyses can be found at: <http://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>.

² CalEEMod is available free of charge at: www.caleemod.com.

³ South Coast AQMD's CEQA regional pollutant emissions significance thresholds can be found at: <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

⁴ South Coast AQMD's guidance for performing a localized air quality analysis can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/localized-significance-thresholds>.

heavy-duty equipment from grading, earth-loading/unloading, paving, architectural coatings, off-road mobile sources (e.g., heavy-duty construction equipment) and on-road mobile sources (e.g., construction worker vehicle trips, material transport trips, and hauling trips). Operation-related air quality impacts may include, but are not limited to, emissions from stationary sources (e.g., boilers and air pollution control devices), area sources (e.g., solvents and coatings), and vehicular trips (e.g., on- and off-road tailpipe emissions and entrained dust). Air quality impacts from indirect sources, such as sources that generate or attract vehicular trips, should be included in the analysis. Furthermore, emissions from the overlapping construction and operational activities should be combined and compared to South Coast AQMD's regional air quality CEQA *operational* thresholds to determine the level of significance.

If the Proposed Project generates diesel emissions from long-term construction or attracts diesel-fueled vehicular trips, especially heavy-duty diesel-fueled vehicles, it is recommended that the Lead Agency perform a mobile source health risk assessment⁵.

Sensitive receptors are people that have an increased sensitivity to air pollution or environmental contaminants and include schools, daycare centers, nursing homes, elderly care facilities, hospitals, and residential dwelling units. The Proposed Project will include, among others, 300 residential units, and to facilitate the purpose of a PEIR as an informational document, it is recommended that the Lead Agency perform a mobile source health risk assessment⁵ to disclose the potential health risks⁶.

In the event that implementation of the Proposed Project requires a permit from South Coast AQMD, South Coast AQMD should be identified as a Responsible Agency for the Proposed Project in the Draft PEIR. The assumptions in the air quality analysis in the PEIR will be the basis for evaluating the permit under CEQA and imposing permit conditions and limits. Questions on permits should be directed to South Coast AQMD's Engineering and Permitting staff at (909) 396-3385.

The South Coast AQMD's *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*⁷ includes suggested policies that local governments can use in their General Plans or through local planning to prevent or reduce potential air pollution impacts and protect public health. It is recommended that the Lead Agency review this Guidance Document as a tool when making local planning and land use decisions.

Mitigation Measures

In the event that the Proposed Project results in significant adverse air quality impacts, CEQA requires that all feasible mitigation measures that go beyond what is required by law be utilized to minimize these impacts. Any impacts resulting from mitigation measures must also be analyzed. Several resources to assist the Lead Agency with identifying potential mitigation measures for the Proposed Project include South Coast AQMD's CEQA Air Quality Handbook,⁸ South Coast AQMD's Mitigation Monitoring and Reporting Plan for the 2022 Air Quality Management Plan,⁹ and Southern California Association of Government's Mitigation Monitoring and Reporting Plan for the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy.¹⁰

⁵ South Coast AQMD's guidance for performing a mobile source health risk assessment can be found at: <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/mobile-source-toxics-analysis>.

⁶ *Ibid.*

⁷ South Coast AQMD. 2005. *Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning*. Available at: <http://www.aqmd.gov/docs/default-source/planning/air-quality-guidance/complete-guidance-document.pdf>.

⁸ <https://www.aqmd.gov/home/rules-compliance/ceqa/air-quality-analysis-handbook>

⁹ South Coast AQMD's 2022 Air Quality Management Plan can be found at: <http://www.aqmd.gov/home/air-quality/clean-air-plans/air-quality-mgt-plan> (Chapter 4 - Control Strategy and Implementation).

¹⁰ Southern California Association of Governments' 2020-2045 RTP/SCS can be found at: https://www.connectsocial.org/Documents/PEIR/certified/Exhibit-A_ConnectSoCal_PEIR.pdf.

South Coast AQMD staff is available to work with the Lead Agency to ensure that air quality, greenhouse gas, and health risk impacts from the Proposed Project are accurately evaluated and mitigated where feasible. If you have any questions regarding this letter, please contact me at swang1@aqmd.gov.

Sincerely,

Sam Wang

Sam Wang
Program Supervisor, CEQA IGR
Planning, Rule Development & Implementation

SW
LAC230117-02
Control Number

From: [Neil Cadman](#)
To: [Samaras, Paul](#)
Subject: Downtown Specific Plan
Date: Friday, January 27, 2023 5:44:24 PM
Attachments: [image001.png](#)

Hi Paul.

Making a comment regarding the specific plan since I will not be able to attend the meeting on 2/2/2023:

I am opposed, as the owner of a building on the 200 block of Richmond Street, to a permanent closing for restaurant/outdoor dining without a thorough review of a plan that specifies equity for each and every property on the street with regards to square footage and loss of parking for businesses. Any usage that resembles what was just removed will be vehemently opposed.

Thank you.

Neil R. Cadman, CPM®
President



214 Main Street #361
El Segundo, CA 90245
310-606-5894
ncadman@cadmangroup.net
www.cadmangroup.net
DRE #01061980

From: [Monica Davis](#)
To: [Samaras, Paul](#)
Cc: [Miller-Zarneke, Tracey](#); [Barbara Boland, Blue Butterfly, Master Gardener](#); [Monica Davis](#); [Anne Dalkey El Segundo Blue Butterfly Ann Dalkey](#); [Sassoon, Elias](#); [Anne Dalkey El Segundo Blue Butterfly Ann Dalkey](#).
Subject: Downtown Specific Plan, Native plant friendly and El Segundo Blue Butterfly habitat restoration
Date: Friday, January 13, 2023 9:49:13 AM

To the City Council, the Environmental committee, and Publics Works,

I am Monica Davis and I am one of the representatives of the Blue Butterfly Conservancy. Our sole purpose is to support the Endangered El Segundo Blue Butterflies.

I love our little city and the rare butterfly that was named after it which has become a city mascot. Our city and schools have adopted this endangered species, but what has our city done to support the needed habitat for its survival? The city of Redondo Beach, the LAX flight path and the Ballona Wetlands have planted habitat. What has the city of El Segundo done to support the Blues, well I am here to help.

I am working with Parks and Rec to identify locations for future planting of the Sea Cliff Buckwheat needed for the species survival.

I would like to propose that the Downtown Specific Plan include specific habit and native plants that support the El Segundo Blues. If you plant it they will come! Wouldn't it be AWESOME to walk into city hall and see our little mascot making a comeback due to the efforts of the city planners. All of the planters on Main Street could have habitat planted to support the Blue Butterflies as well. Once established, these plants need little to no water and very limited care. Most important, the community would love to see these miraculous little butterflies up and down our neighborhood streets. Why our Mayor, Drew Boyles was thrilled, after living in the city some 20 years to see his first Blue Butterfly. I showed him the small area where the Blues have survived, on our dunes.

Please take a stand to bring back an endangered species, by planting habitat that is native to our area and our El Segundo Blue Butterflies.

Respectfully,
Monica Davis restoration

From: [Monica Davis](#)
To: [Samaras, Paul](#)
Subject: Traffic concern
Date: Friday, February 10, 2023 4:35:34 PM

Paul,

This is Monica Davis and we've met at the last downtown specific plan. At the end of the meeting you mentioned if anybody had any other concerns to speak with you. I'm not sure if it's only regards to the dentist plan or other issues in the city. I was going to bring up my concern on the traffic flow pattern on Franklin Street heading east west. I drive it regularly to my physical therapy appointment and it's challenging because sometimes it stops signs go four-way , sometimes two eggs stop going east west and sometimes two-way stop going north south it's unpredictable and troublesome. I was going to bring it up to you a couple weeks ago but then decided not to. Just the other day my neighbor had a bad accident on Franklin somebody ran a stop sign and hit her car with three children. I'm not sure if this is something your department evaluates or if you could forward this email to whomever addresses traffic flow patterns stop signs and the like. I feel like this street needs every evaluation for safety.

Thank you for your time,
Monica Davis

From: [Angela Edwards](#)
To: [Samaras, Paul](#)
Subject: El Segundo Downtown Specific Plan Comment
Date: Friday, January 20, 2023 8:18:25 AM

Dear Paul,

I'm a home owner/resident of El Segundo and I'm imploring the commission to include a walk street. My family and I have loved the use of Richmond during the pandemic and it has become a fixture of our routine and one of our favorite aspects of our community. It increases the accessibility of downtown for pedestrians and encourages the sense of community and the small town feel that we love so much. It has provided the perfect meeting place for friends and extended family to come together and enjoy our beautiful town and support the local businesses. Especially because we have a newborn and are still trying to be safe and be outdoors with others as much as possible.

Please do not take this favorite city perk away from us based on the opinions of a small few, I know that all of our neighbors agree and feel the same about wanting to keep the walk street.

Please let me know if you have any questions.

Thank you,

Angela

Angela Edwards
333 Lomita St
El Segundo, CA 90245

From: [Anthony Edwards](#)
To: [Samaras, Paul](#)
Subject: El Segundo Downtown Specific Plan Comment
Date: Thursday, January 19, 2023 5:53:00 PM

Hello,

As a resident of El Segundo with a family, I'm imploring the commission to include a walk street. We loved the use of Richmond during Covid and need to have something like that continue. Not only does it increase the accessibility of downtown for pedestrians, but it also increases the small town feel that we like so much.

Please do not cave to the loud grumpy minority that does not want a walk street, the vast majority of residents that I have spoken to want a walk street!

Please let me know if you have any questions.

Best,

Anthony

Anthony Edwards
333 Lomita St, El Segundo, CA 90245

From: [Nadine Currimjee](#)
To: [Samaras, Paul](#)
Cc: [Sassoon, Elias](#); [Miller-Zarneke, Tracey](#); [Monica Davis](#); [Barbara Boland, Blue Butterfly, Master Gardener](#); [Anne Dalkey El Segundo Blue Butterfly Ann Dalkey](#).
Subject: Downtown Specific Plan - comment in support of native plants and El Segundo Blue Butterfly habitat restoration
Date: Saturday, February 4, 2023 2:34:38 PM

Dear Mr Samaras,

I am writing in support of Monica Davis' email sent a few weeks ago.

Wouldn't it be wonderful if through a slightly different intent and approach our city's green spaces could become regenerative green corridors which support biodiversity and surround residents with beautiful and diverse native plants adapted to the local conditions?

The community at large would benefit from California native landscapes being planted to replace thirsty expanses of grass however big or small (parkways) in the Downtown area. This could create a showcase of judiciously selected plants (with signage) to inspire residents to convert their own lawns thereby contributing to the creation of a network of productive green corridors, public and private, which would sustain so many insects, birds and other wildlife whilst saving water during droughts and absorbing and potentially storing water during periods of heavy rain with the help of swales. See this "rain garden" implementation by Studio Petrichor: https://www.instagram.com/reel/CoPryg_DwX0/?igshid=YWJhMjJhZTc=

And more here:

<https://studio-petrichor.com/team-petrichor-in-your-community/>

And here:

<https://mailchi.mp/f2f65dfeca63/shawn-maestretti-garden-architecture-is-now-studio-petrichor-15457465>

For reference, planting simply drought tolerant plants does not fulfill the same role with regards to biodiversity and can sometimes be harmful; for example see the link below about the ubiquitous Mexican feather grass in El Segundo which is on the Do Not Plant list for California <https://plantright.org/invasive/stipanassella-tenuissima/>

The "El Segundo Blue Butterfly", amongst many others, needs you!

<https://www.latimes.com/lifestyle/story/2023-01-26/blue-butterflies-in-los-a>

Best regards,
Nadine Currimjee-Quane

Nadine Currimjee-Quane
nadine.currimjee@gmail.com

On Jan 13, 2023, at 1:02 PM, Samaras, Paul <PSamaras@elsegundo.org> wrote:

Good afternoon Ms. Davis,

Thank you for submitting this comment on the Downtown Specific Plan Update project. We will make sure it is part of the record and considered when the Planning Commission and City Council make decisions on the project.

Thank you,

Paul Samaras, AICP | Principal Planner

City of El Segundo Community Development Department

350 Main Street, El Segundo, CA 90245

www.elsegundo.org | ElSegundoBusiness.com | DestinationElSegundo.com

<image001.png>

From: Monica Davis <monicawdavis@gmail.com>

Sent: Friday, January 13, 2023 9:49 AM

To: Samaras, Paul <PSamaras@elsegundo.org>

Cc: Miller-Zarneke, Tracey <tmillerzarneke@elsegundoccb.org>; Barbara Boland, Blue Butterfly, Master Gardener <barbara.boland@mac.com>; Monica Davis <monicawdavis@gmail.com>; Anne Dalkey El Segundo Blue Butterfly Ann Dalkey, <nadine.currimjee@gmail.com>; Sassoon, Elias <esassoon@elsegundo.org>; Anne Dalkey El Segundo Blue Butterfly Ann Dalkey, <abdalkey@verizon.net>

Subject: Downtown Specific Plan, Native plant friendly and El Segundo Blue Butterfly habitat restoration

To the City Council, the Environmental committee, and Publics Works,

I am Monica Davis and I am one of the representatives of the Blue Butterfly Conservancy. Our sole purpose is to support the Endangered El Segundo Blue Butterflies.

I love our little city and the rare butterfly that was named after it which has become a city mascot. Our city and schools have adopted this endangered species, but what has our city done to support the needed habitat for its survival? The city of Redondo Beach, the LAX flight path and the Ballona Wetlands have planted habitat. What has the city of El Segundo done to support the Blues, well I am here to help.

I am working with Parks and Rec to identify locations for future planting of the Sea Cliff Buckwheat needed for the species survival.

I would like to propose that the Downtown Specific Plan include specific habit and native plants that support the El Segundo Blues. If you plant it they will come! Wouldn't it be AWESOME to walk into city hall and see our little mascot making a comeback due to the efforts of the city planners. All of the planters on Main Street could have habitat planted to support the Blue Butterflies as well. Once established, these plants need little to no water and very limited care. Most important, the community would love to see these miraculous little butterflies up and down our neighborhood streets. Why our Mayor, Drew Boyles was thrilled, after living in the city some 20 years to see his first Blue Butterfly. I showed him the small area where the Blues have survived, on our dunes.

Please take a stand to bring back an endangered species, by planting habitat that is native to our area and our El Segundo Blue Butterflies.

Respectfully,

Monica Davis restoration

P: (626) 381-9248
F: (626) 389-5414
E: info@mitschsailaw.com



Mitchell M. Tsai
Attorney At Law

139 South Hudson Avenue
Suite 200
Pasadena, California 91101

VIA E-MAIL

February 20, 2023

Tracy Sherill Weaver, City Clerk
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: tweaver@elsegundo.org

Paul Samaras, Principal Planner
City of El Segundo
350 Main Street
El Segundo, CA 90245
Em: psamaras@elsegundo.org

RE: City of El Segundo's Downtown Specific Plan Update – Agenda Item#14

Honorable Mayor Boyles and Council Members,

On behalf of the Southwest Mountain States Regional Council of Carpenters (“**Southwest Carpenters**” or “**SWMSRCC**”), my Office is submitting these comments for the City of El Segundo’s (“**City**”) February 21, 2023 City Council Meeting regarding the El Segundo Downtown Specific Plan Update (“**Project**”).

The Southwest Carpenters is a labor union representing over 63,000 union carpenters in 10 states, including California, and has a strong interest in well-ordered land use planning and in addressing the environmental impacts of development projects.

Individual members of the Southwest Carpenters live, work, and recreate in the City and surrounding communities and would be directly affected by the Project’s environmental impacts.

The Southwest Carpenters expressly reserves the right to supplement these comments at or prior to hearings on the Project, and at any later hearing and proceeding related to this Project. Gov. Code, § 65009, subd. (b); Pub. Res. Code, § 21177, subd. (a); see *Bakersfield Citizens for Local Control v. Bakersfield* (2004) 124 Cal.App.4th 1184, 1199-

1203; see also *Galante Vineyards v. Monterey Water Dist.* (1997) 60 Cal.App.4th 1109, 1121.

The Southwest Carpenters incorporates by reference all comments raising issues regarding the Environmental Impact Report (EIR) submitted prior to certification of the EIR for the Project. See *Citizens for Clean Energy v City of Woodland* (2014) 225 Cal.App.4th 173, 191 (finding that any party who has objected to the project’s environmental documentation may assert any issue timely raised by other parties).

Moreover, the Southwest Carpenters requests that the City provide notice for any and all notices referring or related to the Project issued under the California Environmental Quality Act (**CEQA**) (Pub. Res. Code, § 21000 *et seq.*), and the California Planning and Zoning Law (“**Planning and Zoning Law**”) (Gov. Code, §§ 65000–65010). California Public Resources Code Sections 21092.2, and 21167(f) and California Government Code Section 65092 require agencies to mail such notices to any person who has filed a written request for them with the clerk of the agency’s governing body.

I. THE CITY SHOULD REQUIRE THE USE OF A LOCAL WORKFORCE TO BENEFIT THE COMMUNITY’S ECONOMIC DEVELOPMENT AND ENVIRONMENT

The City should require the Project to be built using a local workers who have graduated from a Joint Labor-Management Apprenticeship Program approved by the State of California, have at least as many hours of on-the-job experience in the applicable craft which would be required to graduate from such a state-approved apprenticeship training program, or who are registered apprentices in a state-approved apprenticeship training program.

Community benefits such as local hire can also be helpful to reduce environmental impacts and improve the positive economic impact of the Project. Local hire provisions requiring that a certain percentage of workers reside within 10 miles or less of the Project site can reduce the length of vendor trips, reduce greenhouse gas emissions, and provide localized economic benefits. As environmental consultants Matt Hagemann and Paul E. Rosenfeld note:

[A]ny local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the

reduction would vary based on the location and urbanization level of the project site.

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling.

Workforce requirements promote the development of skilled trades that yield sustainable economic development. As the California Workforce Development Board and the University of California, Berkeley Center for Labor Research and Education concluded:

[L]abor should be considered an investment rather than a cost—and investments in growing, diversifying, and upskilling California’s workforce can positively affect returns on climate mitigation efforts. In other words, well-trained workers are key to delivering emissions reductions and moving California closer to its climate targets.¹

Furthermore, workforce policies have significant environmental benefits given that they improve an area’s jobs-housing balance, decreasing the amount and length of job commutes and the associated greenhouse gas (GHG) emissions. In fact, on May 7, 2021, the South Coast Air Quality Management District found that that the “[u]se of a local state-certified apprenticeship program” can result in air pollutant reductions.²

Locating jobs closer to residential areas can have significant environmental benefits. As the California Planning Roundtable noted in 2008:

People who live and work in the same jurisdiction would be more likely to take transit, walk, or bicycle to work than residents of less balanced communities and their vehicle trips would be shorter. Benefits would

¹ California Workforce Development Board (2020) Putting California on the High Road: A Jobs and Climate Action Plan for 2030 at p. ii, *available at* <https://laborcenter.berkeley.edu/wp-content/uploads/2020/09/Putting-California-on-the-High-Road.pdf>.

² South Coast Air Quality Management District (May 7, 2021) Certify Final Environmental Assessment and Adopt Proposed Rule 2305 – Warehouse Indirect Source Rule – Warehouse Actions and Investments to Reduce Emissions Program, and Proposed Rule 316 – Fees for Rule 2305, Submit Rule 2305 for Inclusion Into the SIP, and Approve Supporting Budget Actions, *available at* <http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2021/2021-May7-027.pdf?sfvrsn=10>.

include potential reductions in both vehicle miles traveled and vehicle hours traveled.³

Moreover, local hire mandates and skill-training are critical facets of a strategy to reduce vehicle miles traveled (VMT). As planning experts Robert Cervero and Michael Duncan have noted, simply placing jobs near housing stock is insufficient to achieve VMT reductions given that the skill requirements of available local jobs must match those held by local residents.⁴ Some municipalities have even tied local hire and other workforce policies to local development permits to address transportation issues. Cervero and Duncan note that:

In nearly built-out Berkeley, CA, the approach to balancing jobs and housing is to create local jobs rather than to develop new housing. The city's First Source program encourages businesses to hire local residents, especially for entry- and intermediate-level jobs, and sponsors vocational training to ensure residents are employment-ready. While the program is voluntary, some 300 businesses have used it to date, placing more than 3,000 city residents in local jobs since it was launched in 1986. When needed, these carrots are matched by sticks, since the city is not shy about negotiating corporate participation in First Source as a condition of approval for development permits.

Recently, the State of California verified its commitment towards workforce development through the Affordable Housing and High Road Jobs Act of 2022, otherwise known as Assembly Bill No. 2011 (“**AB2011**”). AB2011 amended the Planning and Zoning Law to allow ministerial, by-right approval for projects being built alongside commercial corridors that meet affordability and labor requirements.

The City should consider utilizing local workforce policies and requirements to benefit the local area economically and to mitigate greenhouse gas, improve air quality, and reduce transportation impacts.

³ California Planning Roundtable (2008) Deconstructing Jobs-Housing Balance at p. 6, available at <https://cproundtable.org/static/media/uploads/publications/cpr-jobs-housing.pdf>

⁴ Cervero, Robert and Duncan, Michael (2006) Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? Journal of the American Planning Association 72 (4), 475-490, 482, available at <http://reconnectingamerica.org/assets/Uploads/UTCT-825.pdf>.

II. **THE CITY SHOULD IMPOSE TRAINING REQUIREMENTS FOR THE PROJECT’S CONSTRUCTION ACTIVITIES TO PREVENT COMMUNITY SPREAD OF COVID-19 AND OTHER INFECTIOUS DISEASES**

Construction work has been defined as a Lower to High-risk activity for COVID-19 spread by the Occupational Safety and Health Administration. Recently, several construction sites have been identified as sources of community spread of COVID-19.⁵

Southwest Carpenters recommend that the Lead Agency adopt additional requirements to mitigate public health risks from the Project’s construction activities. Southwest Carpenters requests that the Lead Agency require safe on-site construction work practices as well as training and certification for any construction workers on the Project Site.

In particular, based upon Southwest Carpenters’ experience with safe construction site work practices, Southwest Carpenters recommends that the Lead Agency require that while construction activities are being conducted at the Project Site:

Construction Site Design:

- The Project Site will be limited to two controlled entry points.
- Entry points will have temperature screening technicians taking temperature readings when the entry point is open.
- The Temperature Screening Site Plan shows details regarding access to the Project Site and Project Site logistics for conducting temperature screening.
- A 48-hour advance notice will be provided to all trades prior to the first day of temperature screening.
- The perimeter fence directly adjacent to the entry points will be clearly marked indicating the appropriate 6-foot social

⁵ Santa Clara County Public Health (June 12, 2020) COVID-19 CASES AT CONSTRUCTION SITES HIGHLIGHT NEED FOR CONTINUED VIGILANCE IN SECTORS THAT HAVE REOPENED, *available at* <https://www.sccgov.org/sites/covid19/Pages/press-release-06-12-2020-cases-at-construction-sites.aspx>.

distancing position for when you approach the screening area. Please reference the Apex temperature screening site map for additional details.

- There will be clear signage posted at the project site directing you through temperature screening.
- Provide hand washing stations throughout the construction site.

Testing Procedures:

- The temperature screening being used are non-contact devices.
- Temperature readings will not be recorded.
- Personnel will be screened upon entering the testing center and should only take 1-2 seconds per individual.
- Hard hats, head coverings, sweat, dirt, sunscreen or any other cosmetics must be removed on the forehead before temperature screening.
- Anyone who refuses to submit to a temperature screening or does not answer the health screening questions will be refused access to the Project Site.
- Screening will be performed at both entrances from 5:30 am to 7:30 am.; main gate [ZONE 1] and personnel gate [ZONE 2]
- After 7:30 am only the main gate entrance [ZONE 1] will continue to be used for temperature testing for anybody gaining entry to the project site such as returning personnel, deliveries, and visitors.
- If the digital thermometer displays a temperature reading above 100.0 degrees Fahrenheit, a second reading will be taken to verify an accurate reading.
- If the second reading confirms an elevated temperature, DHS will instruct the individual that he/she will not be

allowed to enter the Project Site. DHS will also instruct the individual to promptly notify his/her supervisor and his/her human resources (HR) representative and provide them with a copy of Annex A.

Planning

- Require the development of an Infectious Disease Preparedness and Response Plan that will include basic infection prevention measures (requiring the use of personal protection equipment), policies and procedures for prompt identification and isolation of sick individuals, social distancing (prohibiting gatherings of no more than 10 people including all-hands meetings and all-hands lunches) communication and training and workplace controls that meet standards that may be promulgated by the Center for Disease Control, Occupational Safety and Health Administration, Cal/OSHA, California Department of Public Health or applicable local public health agencies.⁶

The United Brotherhood of Carpenters and Carpenters International Training Fund has developed COVID-19 Training and Certification to ensure that Carpenter union members and apprentices conduct safe work practices. The Agency should require that all construction workers undergo COVID-19 Training and Certification before being allowed to conduct construction activities at the Project Site.

Southwest Carpenters has also developed a rigorous Infection Control Risk Assessment (“**ICRA**”) training program to ensure it delivers a workforce that understands how to identify and control infection risks by implementing protocols to

⁶ See also The Center for Construction Research and Training, North America’s Building Trades Unions (April 27 2020) NABTU and CPWR COVID-19 Standards for U.S. Construction Sites, available at https://www.cpwr.com/sites/default/files/NABTU_CPWR_Standards_COVID-19.pdf; Los Angeles County Department of Public Works (2020) Guidelines for Construction Sites During COVID-19 Pandemic, available at https://dpw.lacounty.gov/building-and-safety/docs/pw_guidelines-construction-sites.pdf.

protect themselves and all others during renovation and construction projects in healthcare environments.⁷

ICRA protocols are intended to contain pathogens, control airflow, and protect patients during the construction, maintenance and renovation of healthcare facilities. ICRA protocols prevent cross contamination, minimizing the risk of secondary infections in patients at hospital facilities.

The City should require the Project to be built using a workforce trained in ICRA protocols.

Sincerely,



Jason A. Cohen, Esq.
Attorneys for Southwest Regional
Council of Carpenters

Attached:

March 8, 2021 SWAPE Letter to Mitchell M. Tsai re Local Hire Requirements and Considerations for Greenhouse Gas Modeling (Exhibit A);
Air Quality and GHG Expert Paul Rosenfeld CV (Exhibit B); and
Air Quality and GHG Expert Matt Hagemann CV (Exhibit C).

⁷ For details concerning Southwest Carpenters's ICRA training program, *see* <https://icrahealthcare.com/>.

EXHIBIT A



Technical Consultation, Data Analysis and
Litigation Support for the Environment

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(949) 887-9013
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Paul E. Rosenfeld, PhD
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March 8, 2021

Mitchell M. Tsai
155 South El Molino, Suite 104
Pasadena, CA 91101

Subject: Local Hire Requirements and Considerations for Greenhouse Gas Modeling

Dear Mr. Tsai,

Soil Water Air Protection Enterprise (“SWAPE”) is pleased to provide the following draft technical report explaining the significance of worker trips required for construction of land use development projects with respect to the estimation of greenhouse gas (“GHG”) emissions. The report will also discuss the potential for local hire requirements to reduce the length of worker trips, and consequently, reduced or mitigate the potential GHG impacts.

Worker Trips and Greenhouse Gas Calculations

The California Emissions Estimator Model (“CalEEMod”) is a “statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects.”¹ CalEEMod quantifies construction-related emissions associated with land use projects resulting from off-road construction equipment; on-road mobile equipment associated with workers, vendors, and hauling; fugitive dust associated with grading, demolition, truck loading, and on-road vehicles traveling along paved and unpaved roads; and architectural coating activities; and paving.²

The number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.³

¹ “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

² “California Emissions Estimator Model.” CAPCOA, 2017, available at: <http://www.aqmd.gov/caleemod/home>.

³ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

Specifically, the number and length of vehicle trips is utilized to estimate the vehicle miles travelled (“VMT”) associated with construction. Then, utilizing vehicle-class specific EMFAC 2014 emission factors, CalEEMod calculates the vehicle exhaust, evaporative, and dust emissions resulting from construction-related VMT, including personal vehicles for worker commuting.⁴

Specifically, in order to calculate VMT, CalEEMod multiplies the average daily trip rate by the average overall trip length (see excerpt below):

$$\text{“VMT}_d = \Sigma(\text{Average Daily Trip Rate}_i * \text{Average Overall Trip Length}_i)_n$$

Where:

n = Number of land uses being modeled.”⁵

Furthermore, to calculate the on-road emissions associated with worker trips, CalEEMod utilizes the following equation (see excerpt below):

$$\text{“Emissions}_{\text{pollutant}} = \text{VMT} * \text{EF}_{\text{running,pollutant}}$$

Where:

$\text{Emissions}_{\text{pollutant}}$ = emissions from vehicle running for each pollutant

VMT = vehicle miles traveled

$\text{EF}_{\text{running,pollutant}}$ = emission factor for running emissions.”⁶

Thus, there is a direct relationship between trip length and VMT, as well as a direct relationship between VMT and vehicle running emissions. In other words, when the trip length is increased, the VMT and vehicle running emissions increase as a result. Thus, vehicle running emissions can be reduced by decreasing the average overall trip length, by way of a local hire requirement or otherwise.

Default Worker Trip Parameters and Potential Local Hire Requirements

As previously discussed, the number, length, and vehicle class of worker trips are utilized by CalEEMod to calculate emissions associated with the on-road vehicle trips required to transport workers to and from the Project site during construction.⁷ In order to understand how local hire requirements and associated worker trip length reductions impact GHG emissions calculations, it is important to consider the CalEEMod default worker trip parameters. CalEEMod provides recommended default values based on site-specific information, such as land use type, meteorological data, total lot acreage, project type and typical equipment associated with project type. If more specific project information is known, the user can change the default values and input project-specific values, but the California Environmental Quality Act (“CEQA”) requires that such changes be justified by substantial evidence.⁸ The default number of construction-related worker trips is calculated by multiplying the

⁴ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14-15.

⁵ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 23.

⁶ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

⁷ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

⁸ CalEEMod User Guide, available at: <http://www.caleemod.com/>, p. 1, 9.

number of pieces of equipment for all phases by 1.25, with the exception of worker trips required for the building construction and architectural coating phases.⁹ Furthermore, the worker trip vehicle class is a 50/25/25 percent mix of light duty autos, light duty truck class 1 and light duty truck class 2, respectively.”¹⁰ Finally, the default worker trip length is consistent with the length of the operational home-to-work vehicle trips.¹¹ The operational home-to-work vehicle trip lengths are:

“[B]ased on the *location* and *urbanization* selected on the project characteristic screen. These values were *supplied by the air districts or use a default average for the state*. Each district (or county) also assigns trip lengths for urban and rural settings” (emphasis added).¹²

Thus, the default worker trip length is based on the location and urbanization level selected by the User when modeling emissions. The below table shows the CalEEMod default rural and urban worker trip lengths by air basin (see excerpt below and Attachment A).¹³

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

⁹ “CalEEMod User’s Guide.” CAPCOA, November 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/01_user-39-s-guide2016-3-2_15november2017.pdf?sfvrsn=4, p. 34.

¹⁰ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 15.

¹¹ “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 14.

¹² “Appendix A Calculation Details for CalEEMod.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/02_appendix-a2016-3-2.pdf?sfvrsn=6, p. 21.

¹³ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-84 – D-86.

As demonstrated above, default rural worker trip lengths for air basins in California vary from 10.8- to 19.8- miles, with an average of 16.47 miles. Furthermore, default urban worker trip lengths vary from 10.8- to 14.7- miles, with an average of 11.17 miles. Thus, while default worker trip lengths vary by location, default urban worker trip lengths tend to be shorter in length. Based on these trends evident in the CalEEMod default worker trip lengths, we can reasonably assume that the efficacy of a local hire requirement is especially dependent upon the urbanization of the project site, as well as the project location.

Practical Application of a Local Hire Requirement and Associated Impact

To provide an example of the potential impact of a local hire provision on construction-related GHG emissions, we estimated the significance of a local hire provision for the Village South Specific Plan (“Project”) located in the City of Claremont (“City”). The Project proposed to construct 1,000 residential units, 100,000-SF of retail space, 45,000-SF of office space, as well as a 50-room hotel, on the 24-acre site. The Project location is classified as Urban and lies within the Los Angeles-South Coast County. As a result, the Project has a default worker trip length of 14.7 miles.¹⁴ In an effort to evaluate the potential for a local hire provision to reduce the Project’s construction-related GHG emissions, we prepared an updated model, reducing all worker trip lengths to 10 miles (see Attachment B). Our analysis estimates that if a local hire provision with a 10-mile radius were to be implemented, the GHG emissions associated with Project construction would decrease by approximately 17% (see table below and Attachment C).

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,623
Amortized Construction GHG Emissions (MT CO ₂ e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO ₂ e)	3,024
Amortized Construction GHG Emissions (MT CO ₂ e/year)	100.80
% Decrease in Construction-related GHG Emissions	17%

As demonstrated above, by implementing a local hire provision requiring 10 mile worker trip lengths, the Project could reduce potential GHG emissions associated with construction worker trips. More broadly, any local hire requirement that results in a decreased worker trip length from the default value has the potential to result in a reduction of construction-related GHG emissions, though the significance of the reduction would vary based on the location and urbanization level of the project site.

This serves as an example of the potential impacts of local hire requirements on estimated project-level GHG emissions, though it does not indicate that local hire requirements would result in reduced construction-related GHG emission for all projects. As previously described, the significance of a local hire requirement depends on the worker trip length enforced and the default worker trip length for the project’s urbanization level and location.

¹⁴ “Appendix D Default Data Tables.” CAPCOA, October 2017, available at: http://www.aqmd.gov/docs/default-source/caleemod/05_appendix-d2016-3-2.pdf?sfvrsn=4, p. D-85.

Disclaimer

SWAPE has received limited discovery. Additional information may become available in the future; thus, we retain the right to revise or amend this report when additional information becomes available. Our professional services have been performed using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable environmental consultants practicing in this or similar localities at the time of service. No other warranty, expressed or implied, is made as to the scope of work, work methodologies and protocols, site conditions, analytical testing results, and findings presented. This report reflects efforts which were limited to information that was reasonably accessible at the time of the work, and may contain informational gaps, inconsistencies, or otherwise be incomplete due to the unavailability or uncertainty of information obtained or provided by third parties.

Sincerely,

A handwritten signature in blue ink that reads "Matt Hagemann".

Matt Hagemann, P.G., C.Hg.

A handwritten signature in blue ink that reads "Paul Rosenfeld".

Paul E. Rosenfeld, Ph.D.

Attachment A

Location Type	Location Name	Rural H-W (miles)	Urban H-W (miles)
Air Basin	Great Basin	16.8	10.8
Air Basin	Lake County	16.8	10.8
Air Basin	Lake Tahoe	16.8	10.8
Air Basin	Mojave Desert	16.8	10.8
Air Basin	Mountain	16.8	10.8
Air Basin	North Central	17.1	12.3
Air Basin	North Coast	16.8	10.8
Air Basin	Northeast	16.8	10.8
Air Basin	Sacramento	16.8	10.8
Air Basin	Salton Sea	14.6	11
Air Basin	San Diego	16.8	10.8
Air Basin	San Francisco	10.8	10.8
Air Basin	San Joaquin	16.8	10.8
Air Basin	South Central	16.8	10.8
Air Basin	South Coast	19.8	14.7
Air District	Amador County	16.8	10.8
Air District	Antelope Valley	16.8	10.8
Air District	Bay Area AQMD	10.8	10.8
Air District	Butte County	12.54	12.54
Air District	Calaveras	16.8	10.8
Air District	Colusa County	16.8	10.8
Air District	El Dorado	16.8	10.8
Air District	Feather River	16.8	10.8
Air District	Glenn County	16.8	10.8
Air District	Great Basin	16.8	10.8
Air District	Imperial County	10.2	7.3
Air District	Kern County	16.8	10.8
Air District	Lake County	16.8	10.8
Air District	Lassen County	16.8	10.8
Air District	Mariposa	16.8	10.8
Air District	Mendocino	16.8	10.8
Air District	Modoc County	16.8	10.8
Air District	Mojave Desert	16.8	10.8
Air District	Monterey Bay	16.8	10.8
Air District	North Coast	16.8	10.8
Air District	Northern Sierra	16.8	10.8
Air District	Northern	16.8	10.8
Air District	Placer County	16.8	10.8
Air District	Sacramento	15	10

Air District	San Diego	16.8	10.8
Air District	San Joaquin	16.8	10.8
Air District	San Luis Obispo	13	13
Air District	Santa Barbara	8.3	8.3
Air District	Shasta County	16.8	10.8
Air District	Siskiyou County	16.8	10.8
Air District	South Coast	19.8	14.7
Air District	Tehama County	16.8	10.8
Air District	Tuolumne	16.8	10.8
Air District	Ventura County	16.8	10.8
Air District	Yolo/Solano	15	10
County	Alameda	10.8	10.8
County	Alpine	16.8	10.8
County	Amador	16.8	10.8
County	Butte	12.54	12.54
County	Calaveras	16.8	10.8
County	Colusa	16.8	10.8
County	Contra Costa	10.8	10.8
County	Del Norte	16.8	10.8
County	El Dorado-Lake	16.8	10.8
County	El Dorado-	16.8	10.8
County	Fresno	16.8	10.8
County	Glenn	16.8	10.8
County	Humboldt	16.8	10.8
County	Imperial	10.2	7.3
County	Inyo	16.8	10.8
County	Kern-Mojave	16.8	10.8
County	Kern-San	16.8	10.8
County	Kings	16.8	10.8
County	Lake	16.8	10.8
County	Lassen	16.8	10.8
County	Los Angeles-	16.8	10.8
County	Los Angeles-	19.8	14.7
County	Madera	16.8	10.8
County	Marin	10.8	10.8
County	Mariposa	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Mendocino-	16.8	10.8
County	Merced	16.8	10.8
County	Modoc	16.8	10.8
County	Mono	16.8	10.8
County	Monterey	16.8	10.8
County	Napa	10.8	10.8

County	Nevada	16.8	10.8
County	Orange	19.8	14.7
County	Placer-Lake	16.8	10.8
County	Placer-Mountain	16.8	10.8
County	Placer-	16.8	10.8
County	Plumas	16.8	10.8
County	Riverside-	16.8	10.8
County	Riverside-	19.8	14.7
County	Riverside-Salton	14.6	11
County	Riverside-South	19.8	14.7
County	Sacramento	15	10
County	San Benito	16.8	10.8
County	San Bernardino-	16.8	10.8
County	San Bernardino-	19.8	14.7
County	San Diego	16.8	10.8
County	San Francisco	10.8	10.8
County	San Joaquin	16.8	10.8
County	San Luis Obispo	13	13
County	San Mateo	10.8	10.8
County	Santa Barbara-	8.3	8.3
County	Santa Barbara-	8.3	8.3
County	Santa Clara	10.8	10.8
County	Santa Cruz	16.8	10.8
County	Shasta	16.8	10.8
County	Sierra	16.8	10.8
County	Siskiyou	16.8	10.8
County	Solano-	15	10
County	Solano-San	16.8	10.8
County	Sonoma-North	16.8	10.8
County	Sonoma-San	10.8	10.8
County	Stanislaus	16.8	10.8
County	Sutter	16.8	10.8
County	Tehama	16.8	10.8
County	Trinity	16.8	10.8
County	Tulare	16.8	10.8
County	Tuolumne	16.8	10.8
County	Ventura	16.8	10.8
County	Yolo	15	10
County	Yuba	16.8	10.8
Statewide	Statewide	16.8	10.8

Worker Trip Length by Air Basin		
Air Basin	Rural (miles)	Urban (miles)
Great Basin Valleys	16.8	10.8
Lake County	16.8	10.8
Lake Tahoe	16.8	10.8
Mojave Desert	16.8	10.8
Mountain Counties	16.8	10.8
North Central Coast	17.1	12.3
North Coast	16.8	10.8
Northeast Plateau	16.8	10.8
Sacramento Valley	16.8	10.8
Salton Sea	14.6	11
San Diego	16.8	10.8
San Francisco Bay Area	10.8	10.8
San Joaquin Valley	16.8	10.8
South Central Coast	16.8	10.8
South Coast	19.8	14.7
Average	16.47	11.17
Minimum	10.80	10.80
Maximum	19.80	14.70
Range	9.00	3.90

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

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Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

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tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1969	213.1969	0.0601	0.0000	214.6993
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187
2023	0.6148	3.3649	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5295	1,627.5295	0.1185	0.0000	1,630.4925
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9078	52.9078	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6826	1,721.6826	0.1294	0.0000	1,724.9187

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1713	1.8242	1.1662	2.4000e-003	0.4169	0.0817	0.4986	0.1795	0.0754	0.2549	0.0000	213.1967	213.1967	0.0601	0.0000	214.6991
2022	0.6904	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183
2023	0.6148	3.3648	5.6747	0.0178	1.1963	0.0996	1.2959	0.3203	0.0935	0.4138	0.0000	1,627.5291	1,627.5291	0.1185	0.0000	1,630.4921
2024	4.1619	0.1335	0.2810	5.9000e-004	0.0325	6.4700e-003	0.0390	8.6300e-003	6.0400e-003	0.0147	0.0000	52.9077	52.9077	8.0200e-003	0.0000	53.1082
Maximum	4.1619	4.1142	6.1625	0.0189	1.3058	0.1201	1.4259	0.3460	0.1128	0.4588	0.0000	1,721.6823	1,721.6823	0.1294	0.0000	1,724.9183

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4103	1.4103
2	12-1-2021	2-28-2022	1.3613	1.3613
3	3-1-2022	5-31-2022	1.1985	1.1985
4	6-1-2022	8-31-2022	1.1921	1.1921
5	9-1-2022	11-30-2022	1.1918	1.1918
6	12-1-2022	2-28-2023	1.0774	1.0774
7	3-1-2023	5-31-2023	1.0320	1.0320
8	6-1-2023	8-31-2023	1.0260	1.0260

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9	9-1-2023	11-30-2023	1.0265	1.0265
10	12-1-2023	2-29-2024	2.8857	2.8857
11	3-1-2024	5-31-2024	1.6207	1.6207
		Highest	2.8857	2.8857

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.5000e-004	8.5100e-003	2.0000e-005	2.4700e-003	2.0000e-005	2.4900e-003	6.5000e-004	2.0000e-005	6.7000e-004	0.0000	2.2251	2.2251	7.0000e-005	0.0000	2.2267
Total	2.9000e-003	0.0641	0.0233	2.0000e-004	6.4100e-003	2.1000e-004	6.6200e-003	1.7300e-003	2.0000e-004	1.9300e-003	0.0000	19.6816	19.6816	1.2800e-003	0.0000	19.7136

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814
Total	7.7000e-004	6.0000e-004	6.8100e-003	2.0000e-005	1.9700e-003	2.0000e-005	1.9900e-003	5.2000e-004	1.0000e-005	5.4000e-004	0.0000	1.7801	1.7801	5.0000e-005	0.0000	1.7814

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607
Total	1.6400e-003	1.2700e-003	0.0144	4.0000e-005	4.1600e-003	3.0000e-005	4.2000e-003	1.1100e-003	3.0000e-005	1.1400e-003	0.0000	3.7579	3.7579	1.1000e-004	0.0000	3.7607

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684
Total	2.8000e-004	2.1000e-004	2.4400e-003	1.0000e-005	7.7000e-004	1.0000e-005	7.7000e-004	2.0000e-004	1.0000e-005	2.1000e-004	0.0000	0.6679	0.6679	2.0000e-005	0.0000	0.6684

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.4088	0.3066	3.5305	0.0107	1.1103	8.8700e-003	1.1192	0.2949	8.1700e-003	0.3031	0.0000	966.8117	966.8117	0.0266	0.0000	967.4773
Total	0.4616	2.0027	3.9885	0.0152	1.2243	0.0121	1.2363	0.3278	0.0112	0.3390	0.0000	1,408.7952	1,408.7952	0.0530	0.0000	1,410.1208

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.3753	0.2708	3.1696	0.0101	1.0840	8.4100e-003	1.0924	0.2879	7.7400e-003	0.2957	0.0000	909.3439	909.3439	0.0234	0.0000	909.9291
Total	0.4135	1.5218	3.5707	0.0144	1.1953	9.8700e-003	1.2051	0.3200	9.1400e-003	0.3292	0.0000	1,327.3369	1,327.3369	0.0462	0.0000	1,328.4916

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968
Total	3.7000e-004	2.7000e-004	3.1200e-003	1.0000e-005	1.0700e-003	1.0000e-005	1.0800e-003	2.8000e-004	1.0000e-005	2.9000e-004	0.0000	0.8963	0.8963	2.0000e-005	0.0000	0.8968

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706
Total	5.9000e-004	4.1000e-004	4.9200e-003	2.0000e-005	1.8100e-003	1.0000e-005	1.8200e-003	4.8000e-004	1.0000e-005	4.9000e-004	0.0000	1.4697	1.4697	4.0000e-005	0.0000	1.4706

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558
Total	0.0101	6.9900e-003	0.0835	2.8000e-004	0.0307	2.3000e-004	0.0309	8.1500e-003	2.2000e-004	8.3700e-003	0.0000	24.9407	24.9407	6.1000e-004	0.0000	24.9558

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

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Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2769	46.4588	31.6840	0.0643	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,234.7974	6,234.7974	1.9495	0.0000	6,283.5352
2022	5.3304	38.8967	49.5629	0.1517	9.8688	1.6366	10.7727	3.6558	1.5057	5.1615	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288
2023	4.8957	26.3317	46.7567	0.1472	9.8688	0.7794	10.6482	2.6381	0.7322	3.3702	0.0000	14,807.5269	14,807.5269	1.0250	0.0000	14,833.1521
2024	237.1630	9.5575	15.1043	0.0244	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,361.3989	2,361.3989	0.7177	0.0000	2,379.3421
Maximum	237.1630	46.4588	49.5629	0.1517	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	15,251.5674	15,251.5674	1.9503	0.0000	15,278.5288

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.0568	1,463.0568	0.0927		1,465.3750

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0643	0.0442	0.6042	1.7100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		170.8155	170.8155	5.0300e-003		170.9413
Total	0.1916	4.1394	1.5644	0.0136	0.4346	0.0139	0.4485	0.1176	0.0133	0.1309		1,463.0568	1,463.0568	0.0927		1,465.3750

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296
Total	0.0772	0.0530	0.7250	2.0600e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		204.9786	204.9786	6.0400e-003		205.1296

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217
Total	0.0857	0.0589	0.8056	2.2900e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		227.7540	227.7540	6.7100e-003		227.9217

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941
Total	0.0803	0.0532	0.7432	2.2100e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		219.7425	219.7425	6.0600e-003		219.8941

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	3.2162	2.1318	29.7654	0.0883	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,800.685 7	8,800.685 7	0.2429		8,806.758 2
Total	3.6242	15.3350	33.1995	0.1247	9.8688	0.0949	9.9637	2.6381	0.0883	2.7263		12,697.23 39	12,697.23 39	0.4665		12,708.89 66

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	3.0203	1.9287	27.4113	0.0851	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		8,478.440 8	8,478.440 8	0.2190		8,483.916 0
Total	3.3229	11.9468	30.5127	0.1203	9.8688	0.0797	9.9485	2.6381	0.0738	2.7118		12,252.31 70	12,252.31 70	0.4172		12,262.74 60

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748
Total	0.0566	0.0361	0.5133	1.5900e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		158.7723	158.7723	4.1000e-003		158.8748

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458
Total	0.0535	0.0329	0.4785	1.5400e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		153.8517	153.8517	3.7600e-003		153.9458

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6
Total	0.5707	0.3513	5.1044	0.0165	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,641.085 2	1,641.085 2	0.0401		1,642.088 6

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82
tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2865	46.4651	31.6150	0.0642	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	6,221.4937	6,221.4937	1.9491	0.0000	6,270.2214
2022	5.7218	38.9024	47.3319	0.1455	9.8688	1.6366	10.7736	3.6558	1.5057	5.1615	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663
2023	5.2705	26.4914	44.5936	0.1413	9.8688	0.7800	10.6488	2.6381	0.7328	3.3708	0.0000	14,210.3424	14,210.3424	1.0230	0.0000	14,235.9160
2024	237.2328	9.5610	15.0611	0.0243	1.7884	0.4698	1.8628	0.4743	0.4322	0.5476	0.0000	2,352.4178	2,352.4178	0.7175	0.0000	2,370.3550
Maximum	237.2328	46.4651	47.3319	0.1455	18.2675	2.0461	20.3135	9.9840	1.8824	11.8664	0.0000	14,630.3099	14,630.3099	1.9499	0.0000	14,657.2663

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.6932	1,430.6932	0.0955		1,433.0812

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0715	0.0489	0.5524	1.6100e-003	0.1677	1.3500e-003	0.1690	0.0445	1.2500e-003	0.0457		160.8377	160.8377	4.7300e-003		160.9560
Total	0.2019	4.1943	1.5706	0.0133	0.4346	0.0141	0.4487	0.1176	0.0135	0.1311		1,430.6932	1,430.6932	0.0955		1,433.0812

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472
Total	0.0858	0.0587	0.6629	1.9400e-003	0.2012	1.6300e-003	0.2028	0.0534	1.5000e-003	0.0549		193.0052	193.0052	5.6800e-003		193.1472

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080
Total	0.0954	0.0652	0.7365	2.1500e-003	0.2236	1.8100e-003	0.2254	0.0593	1.6600e-003	0.0610		214.4502	214.4502	6.3100e-003		214.6080

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563
Total	0.0896	0.0589	0.6784	2.0800e-003	0.2236	1.7500e-003	0.2253	0.0593	1.6100e-003	0.0609		206.9139	206.9139	5.7000e-003		207.0563

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	3.5872	2.3593	27.1680	0.0832	8.9533	0.0701	9.0234	2.3745	0.0646	2.4390		8,286.9013	8,286.9013	0.2282		8,292.6058
Total	4.0156	15.5266	30.9685	0.1186	9.8688	0.0957	9.9645	2.6381	0.0891	2.7271		12,075.9763	12,075.9763	0.4663		12,087.6341

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.1325	11,655.1325	0.4151		11,665.5099

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	3.3795	2.1338	24.9725	0.0801	8.9533	0.0681	9.0214	2.3745	0.0627	2.4372		7,983.7318	7,983.7318	0.2055		7,988.8683
Total	3.6978	12.1065	28.3496	0.1144	9.8688	0.0803	9.9491	2.6381	0.0743	2.7124		11,655.1325	11,655.1325	0.4151		11,665.5099

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043
Total	0.0633	0.0400	0.4677	1.5000e-003	0.1677	1.2800e-003	0.1689	0.0445	1.1700e-003	0.0456		149.5081	149.5081	3.8500e-003		149.6043

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587
Total	0.0601	0.0364	0.4354	1.4500e-003	0.1677	1.2600e-003	0.1689	0.0445	1.1600e-003	0.0456		144.8706	144.8706	3.5300e-003		144.9587

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262
Total	0.6406	0.3886	4.6439	0.0155	1.7884	0.0134	1.8018	0.4743	0.0123	0.4866		1,545.2860	1,545.2860	0.0376		1,546.2262

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

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tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

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2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7654	210.7654	0.0600	0.0000	212.2661
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4412	1,342.4412	0.1115	0.0000	1,345.2291
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6355	44.6355	7.8300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6554	1,418.6554	0.1215	0.0000	1,421.6925

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2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2021	0.1704	1.8234	1.1577	2.3800e-003	0.4141	0.0817	0.4958	0.1788	0.0754	0.2542	0.0000	210.7651	210.7651	0.0600	0.0000	212.2658
2022	0.5865	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921
2023	0.5190	3.2850	4.7678	0.0147	0.8497	0.0971	0.9468	0.2283	0.0912	0.3195	0.0000	1,342.4409	1,342.4409	0.1115	0.0000	1,345.2287
2024	4.1592	0.1313	0.2557	5.0000e-004	0.0221	6.3900e-003	0.0285	5.8700e-003	5.9700e-003	0.0118	0.0000	44.6354	44.6354	7.8300e-003	0.0000	44.8311
Maximum	4.1592	4.0240	5.1546	0.0155	0.9509	0.1175	1.0683	0.2518	0.1103	0.3621	0.0000	1,418.6550	1,418.6550	0.1215	0.0000	1,421.6921

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	9-1-2021	11-30-2021	1.4091	1.4091
2	12-1-2021	2-28-2022	1.3329	1.3329
3	3-1-2022	5-31-2022	1.1499	1.1499
4	6-1-2022	8-31-2022	1.1457	1.1457
5	9-1-2022	11-30-2022	1.1415	1.1415
6	12-1-2022	2-28-2023	1.0278	1.0278
7	3-1-2023	5-31-2023	0.9868	0.9868
8	6-1-2023	8-31-2023	0.9831	0.9831

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9	9-1-2023	11-30-2023	0.9798	0.9798
10	12-1-2023	2-29-2024	2.8757	2.8757
11	3-1-2024	5-31-2024	1.6188	1.6188
		Highest	2.8757	2.8757

2.2 Overall Operational
Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

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2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Energy	0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	3,896.0732	3,896.0732	0.1303	0.0468	3,913.2833
Mobile	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Waste						0.0000	0.0000		0.0000	0.0000	207.8079	0.0000	207.8079	12.2811	0.0000	514.8354
Water						0.0000	0.0000		0.0000	0.0000	29.1632	556.6420	585.8052	3.0183	0.0755	683.7567
Total	6.8692	9.5223	30.3407	0.0914	7.7979	0.2260	8.0240	2.0895	0.2219	2.3114	236.9712	12,294.1807	12,531.1519	15.7904	0.1260	12,963.4751

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

3.0 Construction Detail

Construction Phase

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Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

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Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

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Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0012	51.0012	0.0144	0.0000	51.3601

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3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0496	0.0000	0.0496	7.5100e-003	0.0000	7.5100e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0475	0.4716	0.3235	5.8000e-004		0.0233	0.0233		0.0216	0.0216	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600
Total	0.0475	0.4716	0.3235	5.8000e-004	0.0496	0.0233	0.0729	7.5100e-003	0.0216	0.0291	0.0000	51.0011	51.0011	0.0144	0.0000	51.3600

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3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	1.9300e-003	0.0634	0.0148	1.8000e-004	3.9400e-003	1.9000e-004	4.1300e-003	1.0800e-003	1.8000e-004	1.2600e-003	0.0000	17.4566	17.4566	1.2100e-003	0.0000	17.4869
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e-004	5.3000e-004	6.0900e-003	2.0000e-005	1.6800e-003	1.0000e-005	1.6900e-003	4.5000e-004	1.0000e-005	4.6000e-004	0.0000	1.5281	1.5281	5.0000e-005	0.0000	1.5293
Total	2.6500e-003	0.0639	0.0209	2.0000e-004	5.6200e-003	2.0000e-004	5.8200e-003	1.5300e-003	1.9000e-004	1.7200e-003	0.0000	18.9847	18.9847	1.2600e-003	0.0000	19.0161

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7061

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3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1807	0.0000	0.1807	0.0993	0.0000	0.0993	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0389	0.4050	0.2115	3.8000e-004		0.0204	0.0204		0.0188	0.0188	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060
Total	0.0389	0.4050	0.2115	3.8000e-004	0.1807	0.0204	0.2011	0.0993	0.0188	0.1181	0.0000	33.4357	33.4357	0.0108	0.0000	33.7060

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3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234
Total	5.8000e-004	4.3000e-004	4.8700e-003	1.0000e-005	1.3400e-003	1.0000e-005	1.3500e-003	3.6000e-004	1.0000e-005	3.7000e-004	0.0000	1.2225	1.2225	4.0000e-005	0.0000	1.2234

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5405	103.5405	0.0335	0.0000	104.3776

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3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1741	0.0000	0.1741	0.0693	0.0000	0.0693	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0796	0.8816	0.5867	1.1800e-003		0.0377	0.0377		0.0347	0.0347	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775
Total	0.0796	0.8816	0.5867	1.1800e-003	0.1741	0.0377	0.2118	0.0693	0.0347	0.1040	0.0000	103.5403	103.5403	0.0335	0.0000	104.3775

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3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828
Total	1.2200e-003	9.0000e-004	0.0103	3.0000e-005	2.8300e-003	2.0000e-005	2.8600e-003	7.5000e-004	2.0000e-005	7.8000e-004	0.0000	2.5808	2.5808	8.0000e-005	0.0000	2.5828

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0807	0.0000	0.0807	0.0180	0.0000	0.0180	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0127	0.1360	0.1017	2.2000e-004		5.7200e-003	5.7200e-003		5.2600e-003	5.2600e-003	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414
Total	0.0127	0.1360	0.1017	2.2000e-004	0.0807	5.7200e-003	0.0865	0.0180	5.2600e-003	0.0233	0.0000	19.0871	19.0871	6.1700e-003	0.0000	19.2414

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3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590
Total	2.1000e-004	1.5000e-004	1.7400e-003	1.0000e-005	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4587	0.4587	1.0000e-005	0.0000	0.4590

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1324	293.1324	0.0702	0.0000	294.8881

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3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877
Total	0.2158	1.9754	2.0700	3.4100e-003		0.1023	0.1023		0.0963	0.0963	0.0000	293.1321	293.1321	0.0702	0.0000	294.8877

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3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0527	1.6961	0.4580	4.5500e-003	0.1140	3.1800e-003	0.1171	0.0329	3.0400e-003	0.0359	0.0000	441.9835	441.9835	0.0264	0.0000	442.6435
Worker	0.3051	0.2164	2.5233	7.3500e-003	0.7557	6.2300e-003	0.7619	0.2007	5.7400e-003	0.2065	0.0000	663.9936	663.9936	0.0187	0.0000	664.4604
Total	0.3578	1.9125	2.9812	0.0119	0.8696	9.4100e-003	0.8790	0.2336	8.7800e-003	0.2424	0.0000	1,105.9771	1,105.9771	0.0451	0.0000	1,107.1039

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2789	286.2789	0.0681	0.0000	287.9814

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3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811
Total	0.1942	1.7765	2.0061	3.3300e-003		0.0864	0.0864		0.0813	0.0813	0.0000	286.2785	286.2785	0.0681	0.0000	287.9811

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3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0382	1.2511	0.4011	4.3000e-003	0.1113	1.4600e-003	0.1127	0.0321	1.4000e-003	0.0335	0.0000	417.9930	417.9930	0.0228	0.0000	418.5624
Worker	0.2795	0.1910	2.2635	6.9100e-003	0.7377	5.9100e-003	0.7436	0.1960	5.4500e-003	0.2014	0.0000	624.5363	624.5363	0.0164	0.0000	624.9466
Total	0.3177	1.4420	2.6646	0.0112	0.8490	7.3700e-003	0.8564	0.2281	6.8500e-003	0.2349	0.0000	1,042.5294	1,042.5294	0.0392	0.0000	1,043.5090

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.7100e-003	0.0663	0.0948	1.5000e-004		3.3200e-003	3.3200e-003		3.0500e-003	3.0500e-003	0.0000	13.0175	13.0175	4.2100e-003	0.0000	13.1227

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3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160
Total	2.8000e-004	1.9000e-004	2.2300e-003	1.0000e-005	7.3000e-004	1.0000e-005	7.3000e-004	1.9000e-004	1.0000e-005	2.0000e-004	0.0000	0.6156	0.6156	2.0000e-005	0.0000	0.6160

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0109	0.1048	0.1609	2.5000e-004		5.1500e-003	5.1500e-003		4.7400e-003	4.7400e-003	0.0000	22.0292	22.0292	7.1200e-003	0.0000	22.2073

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3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100
Total	4.4000e-004	2.9000e-004	3.5100e-003	1.0000e-005	1.2300e-003	1.0000e-005	1.2400e-003	3.3000e-004	1.0000e-005	3.4000e-004	0.0000	1.0094	1.0094	3.0000e-005	0.0000	1.0100

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	4.1372					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.1600e-003	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745
Total	4.1404	0.0213	0.0317	5.0000e-005		1.0700e-003	1.0700e-003		1.0700e-003	1.0700e-003	0.0000	4.4682	4.4682	2.5000e-004	0.0000	4.4745

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3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394
Total	7.4800e-003	4.9300e-003	0.0596	1.9000e-004	0.0209	1.6000e-004	0.0211	5.5500e-003	1.5000e-004	5.7000e-003	0.0000	17.1287	17.1287	4.3000e-004	0.0000	17.1394

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162
Unmitigated	1.5857	7.9962	19.1834	0.0821	7.7979	0.0580	7.8559	2.0895	0.0539	2.1434	0.0000	7,620.4986	7,620.4986	0.3407	0.0000	7,629.0162

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

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	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
Electricity Unmitigated							0.0000	0.0000		0.0000	0.0000	2,512.6465	2,512.6465	0.1037	0.0215	2,521.6356
NaturalGas Mitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478
NaturalGas Unmitigated	0.1398	1.2312	0.7770	7.6200e-003			0.0966	0.0966		0.0966	0.0000	1,383.4267	1,383.4267	0.0265	0.0254	1,391.6478

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Apartments Low Rise	408494	2.2000e-003	0.0188	8.0100e-003	1.2000e-004		1.5200e-003	1.5200e-003		1.5200e-003	1.5200e-003	0.0000	21.7988	21.7988	4.2000e-004	4.0000e-004	21.9284
Apartments Mid Rise	1.30613e+007	0.0704	0.6018	0.2561	3.8400e-003		0.0487	0.0487		0.0487	0.0487	0.0000	696.9989	696.9989	0.0134	0.0128	701.1408
General Office Building	468450	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003	0.0000	24.9983	24.9983	4.8000e-004	4.6000e-004	25.1468
High Turnover (Sit Down Restaurant)	8.30736e+006	0.0448	0.4072	0.3421	2.4400e-003		0.0310	0.0310		0.0310	0.0310	0.0000	443.3124	443.3124	8.5000e-003	8.1300e-003	445.9468
Hotel	1.74095e+006	9.3900e-003	0.0853	0.0717	5.1000e-004		6.4900e-003	6.4900e-003		6.4900e-003	6.4900e-003	0.0000	92.9036	92.9036	1.7800e-003	1.7000e-003	93.4557
Quality Restaurant	1.84608e+006	9.9500e-003	0.0905	0.0760	5.4000e-004		6.8800e-003	6.8800e-003		6.8800e-003	6.8800e-003	0.0000	98.5139	98.5139	1.8900e-003	1.8100e-003	99.0993
Regional Shopping Center	91840	5.0000e-004	4.5000e-003	3.7800e-003	3.0000e-005		3.4000e-004	3.4000e-004		3.4000e-004	3.4000e-004	0.0000	4.9009	4.9009	9.0000e-005	9.0000e-005	4.9301
Total		0.1398	1.2312	0.7770	7.6200e-003		0.0966	0.0966		0.0966	0.0966	0.0000	1,383.4268	1,383.4268	0.0265	0.0254	1,391.6478

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5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

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5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Apartments Low Rise	106010	33.7770	1.3900e-003	2.9000e-004	33.8978
Apartments Mid Rise	3.94697e+006	1,257.5879	0.0519	0.0107	1,262.0869
General Office Building	584550	186.2502	7.6900e-003	1.5900e-003	186.9165
High Turnover (Sit Down Restaurant)	1.58904e+006	506.3022	0.0209	4.3200e-003	508.1135
Hotel	550308	175.3399	7.2400e-003	1.5000e-003	175.9672
Quality Restaurant	353120	112.5116	4.6500e-003	9.6000e-004	112.9141
Regional Shopping Center	756000	240.8778	9.9400e-003	2.0600e-003	241.7395
Total		2,512.6465	0.1037	0.0215	2,521.6356

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835
Unmitigated	5.1437	0.2950	10.3804	1.6700e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.4137					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.3998					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Hearth	0.0206	0.1763	0.0750	1.1200e-003		0.0143	0.0143		0.0143	0.0143	0.0000	204.1166	204.1166	3.9100e-003	3.7400e-003	205.3295
Landscaping	0.3096	0.1187	10.3054	5.4000e-004		0.0572	0.0572		0.0572	0.0572	0.0000	16.8504	16.8504	0.0161	0.0000	17.2540
Total	5.1437	0.2950	10.3804	1.6600e-003		0.0714	0.0714		0.0714	0.0714	0.0000	220.9670	220.9670	0.0201	3.7400e-003	222.5835

7.0 Water Detail

7.1 Mitigation Measures Water

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	585.8052	3.0183	0.0755	683.7567
Unmitigated	585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Apartments Low Rise	1.62885 / 1.02688	10.9095	0.0535	1.3400e-003	12.6471
Apartments Mid Rise	63.5252 / 40.0485	425.4719	2.0867	0.0523	493.2363
General Office Building	7.99802 / 4.90201	53.0719	0.2627	6.5900e-003	61.6019
High Turnover (Sit Down Restaurant)	10.9272 / 0.697482	51.2702	0.3580	8.8200e-003	62.8482
Hotel	1.26834 / 0.140927	6.1633	0.0416	1.0300e-003	7.5079
Quality Restaurant	2.42827 / 0.154996	11.3934	0.0796	1.9600e-003	13.9663
Regional Shopping Center	4.14806 / 2.54236	27.5250	0.1363	3.4200e-003	31.9490
Total		585.8052	3.0183	0.0755	683.7567

8.0 Waste Detail

8.1 Mitigation Measures Waste

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	207.8079	12.2811	0.0000	514.8354
Unmitigated	207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Apartments Low Rise	11.5	2.3344	0.1380	0.0000	5.7834
Apartments Mid Rise	448.5	91.0415	5.3804	0.0000	225.5513
General Office Building	41.85	8.4952	0.5021	0.0000	21.0464
High Turnover (Sit Down Restaurant)	428.4	86.9613	5.1393	0.0000	215.4430
Hotel	27.38	5.5579	0.3285	0.0000	13.7694
Quality Restaurant	7.3	1.4818	0.0876	0.0000	3.6712
Regional Shopping Center	58.8	11.9359	0.7054	0.0000	29.5706
Total		207.8079	12.2811	0.0000	514.8354

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Annual

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2561	46.4415	31.4494	0.0636	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,163.4166	6,163.4166	1.9475	0.0000	6,212.1039
2022	4.5441	38.8811	40.8776	0.1240	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707
2023	4.1534	25.7658	38.7457	0.1206	7.0088	0.7592	7.7679	1.8799	0.7136	2.5935	0.0000	12,150.4890	12,150.4890	0.9589	0.0000	12,174.4615
2024	237.0219	9.5478	14.9642	0.0239	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,313.1808	2,313.1808	0.7166	0.0000	2,331.0956
Maximum	237.0219	46.4415	40.8776	0.1240	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,493.4403	12,493.4403	1.9485	0.0000	12,518.5707

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.59 50	18,148.59 50	0.4874	0.3300	18,259.11 92
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
Mobile	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Total	41.1168	67.2262	207.5497	0.6278	45.9592	2.4626	48.4217	12.2950	2.4385	14.7336	0.0000	76,811.18 16	76,811.18 16	2.8282	0.4832	77,025.87 86

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.5212	1,409.5212	0.0912		1,411.8015

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1273	4.0952	0.9602	0.0119	0.2669	0.0126	0.2795	0.0732	0.0120	0.0852		1,292.2413	1,292.2413	0.0877		1,294.4337
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0487	0.0313	0.4282	1.1800e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		117.2799	117.2799	3.5200e-003		117.3678
Total	0.1760	4.1265	1.3884	0.0131	0.3810	0.0135	0.3946	0.1034	0.0129	0.1163		1,409.5212	1,409.5212	0.0912		1,411.8015

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414
Total	0.0584	0.0375	0.5139	1.4100e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		140.7359	140.7359	4.2200e-003		140.8414

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904
Total	0.0649	0.0417	0.5710	1.5700e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		156.3732	156.3732	4.6900e-003		156.4904

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813
Total	0.0607	0.0376	0.5263	1.5100e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		150.8754	150.8754	4.2400e-003		150.9813

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.333 6	2,554.333 6	0.6120		2,569.632 2

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4079	13.2032	3.4341	0.0364	0.9155	0.0248	0.9404	0.2636	0.0237	0.2873		3,896.548 2	3,896.548 2	0.2236		3,902.138 4
Worker	2.4299	1.5074	21.0801	0.0607	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		6,042.558 5	6,042.558 5	0.1697		6,046.800 0
Total	2.8378	14.7106	24.5142	0.0971	7.0087	0.0741	7.0828	1.8799	0.0691	1.9490		9,939.106 7	9,939.106 7	0.3933		9,948.938 4

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.209 9	2,555.209 9	0.6079		2,570.406 1

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3027	10.0181	3.1014	0.0352	0.9156	0.0116	0.9271	0.2636	0.0111	0.2747		3,773.876 2	3,773.876 2	0.1982		3,778.830 0
Worker	2.2780	1.3628	19.4002	0.0584	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,821.402 8	5,821.402 8	0.1529		5,825.225 4
Total	2.5807	11.3809	22.5017	0.0936	7.0088	0.0595	7.0682	1.8799	0.0552	1.9350		9,595.279 0	9,595.279 0	0.3511		9,604.055 4

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.584 1	2,207.584 1	0.7140		2,225.433 6

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866
Total	0.0427	0.0255	0.3633	1.0900e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		109.0150	109.0150	2.8600e-003		109.0866

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992
Total	0.0403	0.0233	0.3384	1.0600e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		105.6336	105.6336	2.6300e-003		105.6992

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583
Total	0.4296	0.2481	3.6098	0.0113	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,126.7583	1,126.7583	0.0280		1,127.4583

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08
Unmitigated	9.8489	45.4304	114.8495	0.4917	45.9592	0.3360	46.2951	12.2950	0.3119	12.6070		50,306.60 34	50,306.60 34	2.1807		50,361.12 08

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Summer

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Village South Specific Plan (Proposed)
Los Angeles-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	45.00	1000sqft	1.03	45,000.00	0
High Turnover (Sit Down Restaurant)	36.00	1000sqft	0.83	36,000.00	0
Hotel	50.00	Room	1.67	72,600.00	0
Quality Restaurant	8.00	1000sqft	0.18	8,000.00	0
Apartments Low Rise	25.00	Dwelling Unit	1.56	25,000.00	72
Apartments Mid Rise	975.00	Dwelling Unit	25.66	975,000.00	2789
Regional Shopping Center	56.00	1000sqft	1.29	56,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	33
Climate Zone	9			Operational Year	2028
Utility Company	Southern California Edison				
CO2 Intensity (lb/MW hr)	702.44	CH4 Intensity (lb/MW hr)	0.029	N2O Intensity (lb/MW hr)	0.006

1.3 User Entered Comments & Non-Default Data

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Project Characteristics - Consistent with the DEIR's model.

Land Use - See SWAPE comment regarding residential and retail land uses.

Construction Phase - See SWAPE comment regarding individual construction phase lengths.

Demolition - Consistent with the DEIR's model. See SWAPE comment regarding demolition.

Vehicle Trips - Saturday trips consistent with the DEIR's model. See SWAPE comment regarding weekday and Sunday trips.

Woodstoves - Woodstoves and wood-burning fireplaces consistent with the DEIR's model. See SWAPE comment regarding gas fireplaces.

Energy Use -

Construction Off-road Equipment Mitigation - See SWAPE comment on construction-related mitigation.

Area Mitigation - See SWAPE comment regarding operational mitigation measures.

Water Mitigation - See SWAPE comment regarding operational mitigation measures.

Trips and VMT - Local hire provision

Table Name	Column Name	Default Value	New Value
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	FireplaceWoodMass	1,019.20	0.00
tblFireplaces	NumberWood	1.25	0.00
tblFireplaces	NumberWood	48.75	0.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblTripsAndVMT	WorkerTripLength	14.70	10.00
tblVehicleTrips	ST_TR	7.16	6.17
tblVehicleTrips	ST_TR	6.39	3.87
tblVehicleTrips	ST_TR	2.46	1.39
tblVehicleTrips	ST_TR	158.37	79.82

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

tblVehicleTrips	ST_TR	8.19	3.75
tblVehicleTrips	ST_TR	94.36	63.99
tblVehicleTrips	ST_TR	49.97	10.74
tblVehicleTrips	SU_TR	6.07	6.16
tblVehicleTrips	SU_TR	5.86	4.18
tblVehicleTrips	SU_TR	1.05	0.69
tblVehicleTrips	SU_TR	131.84	78.27
tblVehicleTrips	SU_TR	5.95	3.20
tblVehicleTrips	SU_TR	72.16	57.65
tblVehicleTrips	SU_TR	25.24	6.39
tblVehicleTrips	WD_TR	6.59	5.83
tblVehicleTrips	WD_TR	6.65	4.13
tblVehicleTrips	WD_TR	11.03	6.41
tblVehicleTrips	WD_TR	127.15	65.80
tblVehicleTrips	WD_TR	8.17	3.84
tblVehicleTrips	WD_TR	89.95	62.64
tblVehicleTrips	WD_TR	42.70	9.43
tblWoodstoves	NumberCatalytic	1.25	0.00
tblWoodstoves	NumberCatalytic	48.75	0.00
tblWoodstoves	NumberNoncatalytic	1.25	0.00
tblWoodstoves	NumberNoncatalytic	48.75	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveDayYear	25.00	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00
tblWoodstoves	WoodstoveWoodMass	999.60	0.00

2.0 Emissions Summary

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2021	4.2621	46.4460	31.4068	0.0635	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	6,154.3377	6,154.3377	1.9472	0.0000	6,203.0186
2022	4.7966	38.8851	39.6338	0.1195	8.8255	1.6361	10.4616	3.6369	1.5052	5.1421	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013
2023	4.3939	25.8648	37.5031	0.1162	7.0088	0.7598	7.7685	1.8799	0.7142	2.5940	0.0000	11,710.4080	11,710.4080	0.9617	0.0000	11,734.4497
2024	237.0656	9.5503	14.9372	0.0238	1.2171	0.4694	1.2875	0.3229	0.4319	0.4621	0.0000	2,307.0517	2,307.0517	0.7164	0.0000	2,324.9627
Maximum	237.0656	46.4460	39.6338	0.1195	18.2032	2.0456	20.2488	9.9670	1.8820	11.8490	0.0000	12,035.3440	12,035.3440	1.9482	0.0000	12,060.6013

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Energy	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387
Mobile	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Total	40.7912	67.7872	202.7424	0.6043	45.9592	2.4640	48.4231	12.2950	2.4399	14.7349	0.0000	74,422.3787	74,422.3787	2.8429	0.4832	74,637.4417

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N2O	CO2e
Percent Reduction	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

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	9/1/2021	10/12/2021	5	30	
2	Site Preparation	Site Preparation	10/13/2021	11/9/2021	5	20	
3	Grading	Grading	11/10/2021	1/11/2022	5	45	
4	Building Construction	Building Construction	1/12/2022	12/12/2023	5	500	
5	Paving	Paving	12/13/2023	1/30/2024	5	35	
6	Architectural Coating	Architectural Coating	1/31/2024	3/19/2024	5	35	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 112.5

Acres of Paving: 0

Residential Indoor: 2,025,000; Residential Outdoor: 675,000; Non-Residential Indoor: 326,400; Non-Residential Outdoor: 108,800; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	458.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	801.00	143.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	160.00	0.00	0.00	10.00	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411		3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419		3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.3262	1,380.3262	0.0941		1,382.6791

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					3.3074	0.0000	3.3074	0.5008	0.0000	0.5008			0.0000			0.0000
Off-Road	3.1651	31.4407	21.5650	0.0388		1.5513	1.5513		1.4411	1.4411	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174
Total	3.1651	31.4407	21.5650	0.0388	3.3074	1.5513	4.8588	0.5008	1.4411	1.9419	0.0000	3,747.9449	3,747.9449	1.0549		3,774.3174

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.2 Demolition - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.1304	4.1454	1.0182	0.0117	0.2669	0.0128	0.2797	0.0732	0.0122	0.0854		1,269.8555	1,269.8555	0.0908		1,272.1252
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0532	0.0346	0.3963	1.1100e-003	0.1141	9.5000e-004	0.1151	0.0303	8.8000e-004	0.0311		110.4707	110.4707	3.3300e-003		110.5539
Total	0.1835	4.1800	1.4144	0.0128	0.3810	0.0137	0.3948	0.1034	0.0131	0.1165		1,380.3262	1,380.3262	0.0941		1,382.6791

3.3 Site Preparation - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809		3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116		3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					18.0663	0.0000	18.0663	9.9307	0.0000	9.9307			0.0000			0.0000
Off-Road	3.8882	40.4971	21.1543	0.0380		2.0445	2.0445		1.8809	1.8809	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573
Total	3.8882	40.4971	21.1543	0.0380	18.0663	2.0445	20.1107	9.9307	1.8809	11.8116	0.0000	3,685.6569	3,685.6569	1.1920		3,715.4573

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.3 Site Preparation - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646
Total	0.0638	0.0415	0.4755	1.3300e-003	0.1369	1.1400e-003	0.1381	0.0363	1.0500e-003	0.0374		132.5649	132.5649	3.9900e-003		132.6646

3.4 Grading - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265		6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230		6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	4.1912	46.3998	30.8785	0.0620		1.9853	1.9853		1.8265	1.8265	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134
Total	4.1912	46.3998	30.8785	0.0620	8.6733	1.9853	10.6587	3.5965	1.8265	5.4230	0.0000	6,007.0434	6,007.0434	1.9428		6,055.6134

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051
Total	0.0709	0.0462	0.5284	1.4800e-003	0.1521	1.2700e-003	0.1534	0.0404	1.1700e-003	0.0415		147.2943	147.2943	4.4300e-003		147.4051

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041		6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006		6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					8.6733	0.0000	8.6733	3.5965	0.0000	3.5965			0.0000			0.0000
Off-Road	3.6248	38.8435	29.0415	0.0621		1.6349	1.6349		1.5041	1.5041	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158
Total	3.6248	38.8435	29.0415	0.0621	8.6733	1.6349	10.3082	3.5965	1.5041	5.1006	0.0000	6,011.4105	6,011.4105	1.9442		6,060.0158

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207
Total	0.0665	0.0416	0.4861	1.4300e-003	0.1521	1.2300e-003	0.1534	0.0404	1.1300e-003	0.0415		142.1207	142.1207	4.0000e-003		142.2207

3.5 Building Construction - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612		2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.0104	9,481.0104	0.3984		9,490.9691

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322
Total	1.7062	15.6156	16.3634	0.0269		0.8090	0.8090		0.7612	0.7612	0.0000	2,554.3336	2,554.3336	0.6120		2,569.6322

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.4284	13.1673	3.8005	0.0354	0.9155	0.0256	0.9412	0.2636	0.0245	0.2881		3,789.0750	3,789.0750	0.2381		3,795.0283
Worker	2.6620	1.6677	19.4699	0.0571	6.0932	0.0493	6.1425	1.6163	0.0454	1.6617		5,691.9354	5,691.9354	0.1602		5,695.9408
Total	3.0904	14.8350	23.2704	0.0926	7.0087	0.0749	7.0836	1.8799	0.0699	1.9498		9,481.0104	9,481.0104	0.3984		9,490.9691

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584		2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.1981	9,155.1981	0.3538		9,164.0437

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061
Total	1.5728	14.3849	16.2440	0.0269		0.6997	0.6997		0.6584	0.6584	0.0000	2,555.2099	2,555.2099	0.6079		2,570.4061

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.3183	9.9726	3.3771	0.0343	0.9156	0.0122	0.9277	0.2636	0.0116	0.2752		3,671.4007	3,671.4007	0.2096		3,676.6417
Worker	2.5029	1.5073	17.8820	0.0550	6.0932	0.0479	6.1411	1.6163	0.0441	1.6604		5,483.7974	5,483.7974	0.1442		5,487.4020
Total	2.8211	11.4799	21.2591	0.0893	7.0088	0.0601	7.0688	1.8799	0.0557	1.9356		9,155.1981	9,155.1981	0.3538		9,164.0437

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694		2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	1.0327	10.1917	14.5842	0.0228		0.5102	0.5102		0.4694	0.4694	0.0000	2,207.5841	2,207.5841	0.7140		2,225.4336

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603
Total	0.0469	0.0282	0.3349	1.0300e-003	0.1141	9.0000e-004	0.1150	0.0303	8.3000e-004	0.0311		102.6928	102.6928	2.7000e-003		102.7603

3.6 Paving - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310		2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	0.9882	9.5246	14.6258	0.0228		0.4685	0.4685		0.4310	0.4310	0.0000	2,207.5472	2,207.5472	0.7140		2,225.3963

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.6 Paving - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663
Total	0.0444	0.0257	0.3114	1.0000e-003	0.1141	8.8000e-004	0.1150	0.0303	8.1000e-004	0.0311		99.5045	99.5045	2.4700e-003		99.5663

3.7 Architectural Coating - 2024

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609		281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	236.4115					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1808	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443
Total	236.5923	1.2188	1.8101	2.9700e-003		0.0609	0.0609		0.0609	0.0609	0.0000	281.4481	281.4481	0.0159		281.8443

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

3.7 Architectural Coating - 2024

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000		0.0000
Worker	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410
Total	0.4734	0.2743	3.3220	0.0107	1.2171	9.4300e-003	1.2266	0.3229	8.6800e-003	0.3315		1,061.3818	1,061.3818	0.0264		1,062.0410

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839
Unmitigated	9.5233	45.9914	110.0422	0.4681	45.9592	0.3373	46.2965	12.2950	0.3132	12.6083		47,917.8005	47,917.8005	2.1953		47,972.6839

4.2 Trip Summary Information

Land Use	Average Daily Trip Rate			Unmitigated	Mitigated
	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Apartments Low Rise	145.75	154.25	154.00	506,227	506,227
Apartments Mid Rise	4,026.75	3,773.25	4075.50	13,660,065	13,660,065
General Office Building	288.45	62.55	31.05	706,812	706,812
High Turnover (Sit Down Restaurant)	2,368.80	2,873.52	2817.72	3,413,937	3,413,937
Hotel	192.00	187.50	160.00	445,703	445,703
Quality Restaurant	501.12	511.92	461.20	707,488	707,488
Regional Shopping Center	528.08	601.44	357.84	1,112,221	1,112,221
Total	8,050.95	8,164.43	8,057.31	20,552,452	20,552,452

4.3 Trip Type Information

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Land Use	Miles			Trip %			Trip Purpose %		
	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Apartments Low Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
Apartments Mid Rise	14.70	5.90	8.70	40.20	19.20	40.60	86	11	3
General Office Building	16.60	8.40	6.90	33.00	48.00	19.00	77	19	4
High Turnover (Sit Down Restaurant)	16.60	8.40	6.90	8.50	72.50	19.00	37	20	43
Hotel	16.60	8.40	6.90	19.40	61.60	19.00	58	38	4
Quality Restaurant	16.60	8.40	6.90	12.00	69.00	19.00	38	18	44
Regional Shopping Center	16.60	8.40	6.90	16.30	64.70	19.00	54	35	11

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Apartments Low Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Apartments Mid Rise	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
General Office Building	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
High Turnover (Sit Down Restaurant)	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Hotel	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Quality Restaurant	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821
Regional Shopping Center	0.543088	0.044216	0.209971	0.116369	0.014033	0.006332	0.021166	0.033577	0.002613	0.001817	0.005285	0.000712	0.000821

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7
NaturalGas Unmitigated	0.7660	6.7462	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.983 2	8,355.983 2	0.1602	0.1532	8,405.638 7

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1119.16	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35784.3	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1283.42	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22759.9	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4769.72	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5057.75	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	251.616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Apartments Low Rise	1.11916	0.0121	0.1031	0.0439	6.6000e-004		8.3400e-003	8.3400e-003		8.3400e-003	8.3400e-003		131.6662	131.6662	2.5200e-003	2.4100e-003	132.4486
Apartments Mid Rise	35.7843	0.3859	3.2978	1.4033	0.0211		0.2666	0.2666		0.2666	0.2666		4,209.9164	4,209.9164	0.0807	0.0772	4,234.9339
General Office Building	1.28342	0.0138	0.1258	0.1057	7.5000e-004		9.5600e-003	9.5600e-003		9.5600e-003	9.5600e-003		150.9911	150.9911	2.8900e-003	2.7700e-003	151.8884
High Turnover (Sit Down Restaurant)	22.7599	0.2455	2.2314	1.8743	0.0134		0.1696	0.1696		0.1696	0.1696		2,677.6342	2,677.6342	0.0513	0.0491	2,693.5460
Hotel	4.76972	0.0514	0.4676	0.3928	2.8100e-003		0.0355	0.0355		0.0355	0.0355		561.1436	561.1436	0.0108	0.0103	564.4782
Quality Restaurant	5.05775	0.0545	0.4959	0.4165	2.9800e-003		0.0377	0.0377		0.0377	0.0377		595.0298	595.0298	0.0114	0.0109	598.5658
Regional Shopping Center	0.251616	2.7100e-003	0.0247	0.0207	1.5000e-004		1.8700e-003	1.8700e-003		1.8700e-003	1.8700e-003		29.6019	29.6019	5.7000e-004	5.4000e-004	29.7778
Total		0.7660	6.7463	4.2573	0.0418		0.5292	0.5292		0.5292	0.5292		8,355.9832	8,355.9832	0.1602	0.1532	8,405.6387

6.0 Area Detail

6.1 Mitigation Measures Area

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192
Unmitigated	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	2.2670					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	24.1085					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Hearth	1.6500	14.1000	6.0000	0.0900		1.1400	1.1400		1.1400	1.1400	0.0000	18,000.0000	18,000.0000	0.3450	0.3300	18,106.9650
Landscaping	2.4766	0.9496	82.4430	4.3600e-003		0.4574	0.4574		0.4574	0.4574		148.5950	148.5950	0.1424		152.1542
Total	30.5020	15.0496	88.4430	0.0944		1.5974	1.5974		1.5974	1.5974	0.0000	18,148.5950	18,148.5950	0.4874	0.3300	18,259.1192

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type
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10.0 Stationary Equipment

Village South Specific Plan (Proposed) - Los Angeles-South Coast County, Winter

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
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Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
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User Defined Equipment

Equipment Type	Number
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11.0 Vegetation

Attachment C

Local Hire Provision Net Change	
Without Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,623
Amortized (MT CO2e/year)	120.77
With Local Hire Provision	
Total Construction GHG Emissions (MT CO2e)	3,024
Amortized (MT CO2e/year)	100.80
<i>% Decrease in Construction-related GHG Emissions</i>	17%

EXHIBIT B



Paul Rosenfeld, Ph.D.

Principal Environmental Chemist

Chemical Fate and Transport & Air Dispersion Modeling

Risk Assessment & Remediation Specialist

Education

Ph.D. Soil Chemistry, University of Washington, 1999. Dissertation on volatile organic compound filtration.

M.S. Environmental Science, U.C. Berkeley, 1995. Thesis on organic waste economics.

B.A. Environmental Studies, U.C. Santa Barbara, 1991. Thesis on wastewater treatment.

Professional Experience

Dr. Rosenfeld has over 25 years' experience conducting environmental investigations and risk assessments for evaluating impacts to human health, property, and ecological receptors. His expertise focuses on the fate and transport of environmental contaminants, human health risk, exposure assessment, and ecological restoration. Dr. Rosenfeld has evaluated and modeled emissions from unconventional oil drilling operations, oil spills, landfills, boilers and incinerators, process stacks, storage tanks, confined animal feeding operations, and many other industrial and agricultural sources. His project experience ranges from monitoring and modeling of pollution sources to evaluating impacts of pollution on workers at industrial facilities and residents in surrounding communities.

Dr. Rosenfeld has investigated and designed remediation programs and risk assessments for contaminated sites containing lead, heavy metals, mold, bacteria, particulate matter, petroleum hydrocarbons, chlorinated solvents, pesticides, radioactive waste, dioxins and furans, semi- and volatile organic compounds, PCBs, PAHs, perchlorate, asbestos, per- and poly-fluoroalkyl substances (PFOA/PFOS), unusual polymers, fuel oxygenates (MTBE), among other pollutants. Dr. Rosenfeld also has experience evaluating greenhouse gas emissions from various projects and is an expert on the assessment of odors from industrial and agricultural sites, as well as the evaluation of odor nuisance impacts and technologies for abatement of odorous emissions. As a principal scientist at SWAPE, Dr. Rosenfeld directs air dispersion modeling and exposure assessments. He has served as an expert witness and testified about pollution sources causing nuisance and/or personal injury at dozens of sites and has testified as an expert witness on more than ten cases involving exposure to air contaminants from industrial sources.

Professional History:

Soil Water Air Protection Enterprise (SWAPE); 2003 to present; Principal and Founding Partner
UCLA School of Public Health; 2007 to 2011; Lecturer (Assistant Researcher)
UCLA School of Public Health; 2003 to 2006; Adjunct Professor
UCLA Environmental Science and Engineering Program; 2002-2004; Doctoral Intern Coordinator
UCLA Institute of the Environment, 2001-2002; Research Associate
Komex H₂O Science, 2001 to 2003; Senior Remediation Scientist
National Groundwater Association, 2002-2004; Lecturer
San Diego State University, 1999-2001; Adjunct Professor
Anteon Corp., San Diego, 2000-2001; Remediation Project Manager
Ogden (now Amec), San Diego, 2000-2000; Remediation Project Manager
Bechtel, San Diego, California, 1999 – 2000; Risk Assessor
King County, Seattle, 1996 – 1999; Scientist
James River Corp., Washington, 1995-96; Scientist
Big Creek Lumber, Davenport, California, 1995; Scientist
Plumas Corp., California and USFS, Tahoe 1993-1995; Scientist
Peace Corps and World Wildlife Fund, St. Kitts, West Indies, 1991-1993; Scientist

Publications:

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Sullivan, P. J. Clark, J.J.J., Agardy, F. J., **Rosenfeld, P.E.** (2007). *Toxic Legacy, Synthetic Toxins in the Food, Water, and Air in American Cities*. Boston Massachusetts: Elsevier Publishing

Rosenfeld, P.E., and Suffet I.H. (2004). Control of Compost Odor Using High Carbon Wood Ash. *Water Science and Technology*. 49(9),171-178.

Rosenfeld P. E., J.J. Clark, I.H. (Mel) Suffet (2004). The Value of An Odor-Quality-Wheel Classification Scheme For The Urban Environment. *Water Environment Federation's Technical Exhibition and Conference (WEFTEC) 2004*. New Orleans, October 2-6, 2004.

Rosenfeld, P.E., and Suffet, I.H. (2004). Understanding Odorants Associated With Compost, Biomass Facilities, and the Land Application of Biosolids. *Water Science and Technology*. 49(9), 193-199.

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Rosenfeld, P. E., Grey, M. A., Sellev, P. (2004). Measurement of Biosolids Odor and Odorant Emissions from Windrows, Static Pile and Biofilter. *Water Environment Research*. 76(4), 310-315.

Rosenfeld, P.E., Grey, M and Suffet, M. (2002). Compost Demonstration Project, Sacramento California Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Integrated Waste Management Board Public Affairs Office, Publications Clearinghouse (MS-6)*, Sacramento, CA Publication #442-02-008.

Rosenfeld, P.E., and C.L. Henry. (2001). Characterization of odor emissions from three different biosolids. *Water Soil and Air Pollution*. 127(1-4), 173-191.

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Rosenfeld, P.E., C.L. Henry and D. Bennett. (2001). Wastewater dewatering polymer affect on biosolids odor emissions and microbial activity. *Water Environment Research*. 73(4), 363-367.

Rosenfeld, P.E., and C.L. Henry. (2001). Activated Carbon and Wood Ash Sorption of Wastewater, Compost, and Biosolids Odorants. *Water Environment Research*, 73, 388-393.

Rosenfeld, P.E., and Henry C. L., (2001). High carbon wood ash effect on biosolids microbial activity and odor. *Water Environment Research*. 131(1-4), 247-262.

Chollack, T. and **P. Rosenfeld**. (1998). Compost Amendment Handbook For Landscaping. Prepared for and distributed by the City of Redmond, Washington State.

Rosenfeld, P. E. (1992). The Mount Liamuiga Crater Trail. *Heritage Magazine of St. Kitts*, 3(2).

Rosenfeld, P. E. (1993). High School Biogas Project to Prevent Deforestation On St. Kitts. *Biomass Users Network*, 7(1).

Rosenfeld, P. E. (1998). Characterization, Quantification, and Control of Odor Emissions From Biosolids Application To Forest Soil. Doctoral Thesis. University of Washington College of Forest Resources.

Rosenfeld, P. E. (1994). Potential Utilization of Small Diameter Trees on Sierra County Public Land. Masters thesis reprinted by the Sierra County Economic Council. Sierra County, California.

Rosenfeld, P. E. (1991). How to Build a Small Rural Anaerobic Digester & Uses Of Biogas In The First And Third World. Bachelors Thesis. University of California.

Presentations:

Rosenfeld, P.E., Sutherland, A; Hesse, R.; Zapata, A. (October 3-6, 2013). Air dispersion modeling of volatile organic emissions from multiple natural gas wells in Decatur, TX. *44th Western Regional Meeting, American Chemical Society*. Lecture conducted from Santa Clara, CA.

Sok, H.L.; Waller, C.C.; Feng, L.; Gonzalez, J.; Sutherland, A.J.; Wisdom-Stack, T.; Sahai, R.K.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Atrazine: A Persistent Pesticide in Urban Drinking Water. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Feng, L.; Gonzalez, J.; Sok, H.L.; Sutherland, A.J.; Waller, C.C.; Wisdom-Stack, T.; Sahai, R.K.; La, M.; Hesse, R.C.; **Rosenfeld, P.E.** (June 20-23, 2010). Bringing Environmental Justice to East St. Louis, Illinois. *Urban Environmental Pollution*. Lecture conducted from Boston, MA.

Rosenfeld, P.E. (April 19-23, 2009). Perfluorooctanoic Acid (PFOA) and Perfluorooctane Sulfonate (PFOS) Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*, Lecture conducted from Tuscon, AZ.

Rosenfeld, P.E. (April 19-23, 2009). Cost to Filter Atrazine Contamination from Drinking Water in the United States” Contamination in Drinking Water From the Use of Aqueous Film Forming Foams (AFFF) at Airports in the United States. *2009 Ground Water Summit and 2009 Ground Water Protection Council Spring Meeting*. Lecture conducted from Tuscon, AZ.

Wu, C., Tam, L., Clark, J., **Rosenfeld, P.** (20-22 July, 2009). Dioxin and furan blood lipid concentrations in populations living near four wood treatment facilities in the United States. Brebbia, C.A. and Popov, V., eds., *Air Pollution XVII: Proceedings of the Seventeenth International Conference on Modeling, Monitoring and Management of Air Pollution*. Lecture conducted from Tallinn, Estonia.

Rosenfeld, P. E. (October 15-18, 2007). Moss Point Community Exposure To Contaminants From A Releasing Facility. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). The Repeated Trespass of Tritium-Contaminated Water Into A Surrounding Community Form Repeated Waste Spills From A Nuclear Power Plant. *The 23rd Annual International Conferences on Soils Sediment and Water*. Platform lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld, P. E. (October 15-18, 2007). Somerville Community Exposure To Contaminants From Wood Treatment Facility Emissions. The *23rd Annual International Conferences on Soils Sediment and Water*. Lecture conducted from University of Massachusetts, Amherst MA.

Rosenfeld P. E. (March 2007). Production, Chemical Properties, Toxicology, & Treatment Case Studies of 1,2,3-Trichloropropane (TCP). *The Association for Environmental Health and Sciences (AEHS) Annual Meeting*. Lecture conducted from San Diego, CA.

Rosenfeld P. E. (March 2007). Blood and Attic Sampling for Dioxin/Furan, PAH, and Metal Exposure in Florida, Alabama. *The AEHS Annual Meeting*. Lecture conducted from San Diego, CA.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (August 21 – 25, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *The 26th International Symposium on Halogenated Persistent Organic Pollutants – DIOXIN2006*. Lecture conducted from Radisson SAS Scandinavia Hotel in Oslo Norway.

Hensley A.R., Scott, A., **Rosenfeld P.E.**, Clark, J.J.J. (November 4-8, 2006). Dioxin Containing Attic Dust And Human Blood Samples Collected Near A Former Wood Treatment Facility. *APHA 134 Annual Meeting & Exposition*. Lecture conducted from Boston Massachusetts.

Paul Rosenfeld Ph.D. (October 24-25, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. Mealey's C8/PFOA. *Science, Risk & Litigation Conference*. Lecture conducted from The Rittenhouse Hotel, Philadelphia, PA.

Paul Rosenfeld Ph.D. (September 19, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, *Toxicology and Remediation PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel, Irvine California.

Paul Rosenfeld Ph.D. (September 19, 2005). Fate, Transport, Toxicity, And Persistence of 1,2,3-TCP. *PEMA Emerging Contaminant Conference*. Lecture conducted from Hilton Hotel in Irvine, California.

Paul Rosenfeld Ph.D. (September 26-27, 2005). Fate, Transport and Persistence of PDBEs. *Mealey's Groundwater Conference*. Lecture conducted from Ritz Carlton Hotel, Marina Del Ray, California.

Paul Rosenfeld Ph.D. (June 7-8, 2005). Fate, Transport and Persistence of PFOA and Related Chemicals. *International Society of Environmental Forensics: Focus On Emerging Contaminants*. Lecture conducted from Sheraton Oceanfront Hotel, Virginia Beach, Virginia.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Fate Transport, Persistence and Toxicology of PFOA and Related Perfluorochemicals. *2005 National Groundwater Association Ground Water And Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld Ph.D. (July 21-22, 2005). Brominated Flame Retardants in Groundwater: Pathways to Human Ingestion, Toxicology and Remediation. *2005 National Groundwater Association Ground Water and Environmental Law Conference*. Lecture conducted from Wyndham Baltimore Inner Harbor, Baltimore Maryland.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. and Rob Hesse R.G. (May 5-6, 2004). Tert-butyl Alcohol Liability and Toxicology, A National Problem and Unquantified Liability. *National Groundwater Association. Environmental Law Conference*. Lecture conducted from Congress Plaza Hotel, Chicago Illinois.

Paul Rosenfeld, Ph.D. (March 2004). Perchlorate Toxicology. *Meeting of the American Groundwater Trust*. Lecture conducted from Phoenix Arizona.

Hagemann, M.F., **Paul Rosenfeld, Ph.D.** and Rob Hesse (2004). Perchlorate Contamination of the Colorado River. *Meeting of tribal representatives*. Lecture conducted from Parker, AZ.

Paul Rosenfeld, Ph.D. (April 7, 2004). A National Damage Assessment Model For PCE and Dry Cleaners. *Drycleaner Symposium. California Ground Water Association*. Lecture conducted from Radison Hotel, Sacramento, California.

Rosenfeld, P. E., Grey, M., (June 2003) Two stage biofilter for biosolids composting odor control. *Seventh International In Situ And On Site Bioremediation Symposium Battelle Conference* Orlando, FL.

Paul Rosenfeld, Ph.D. and James Clark Ph.D. (February 20-21, 2003) Understanding Historical Use, Chemical Properties, Toxicity and Regulatory Guidance of 1,4 Dioxane. *National Groundwater Association. Southwest Focus Conference. Water Supply and Emerging Contaminants..* Lecture conducted from Hyatt Regency Phoenix Arizona.

Paul Rosenfeld, Ph.D. (February 6-7, 2003). Underground Storage Tank Litigation and Remediation. *California CUPA Forum*. Lecture conducted from Marriott Hotel, Anaheim California.

Paul Rosenfeld, Ph.D. (October 23, 2002) Underground Storage Tank Litigation and Remediation. *EPA Underground Storage Tank Roundtable*. Lecture conducted from Sacramento California.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Understanding Odor from Compost, *Wastewater and Industrial Processes. Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Suffet, M. (October 7- 10, 2002). Using High Carbon Wood Ash to Control Compost Odor. *Sixth Annual Symposium On Off Flavors in the Aquatic Environment. International Water Association*. Lecture conducted from Barcelona Spain.

Rosenfeld, P.E. and Grey, M. A. (September 22-24, 2002). Biocycle Composting For Coastal Sage Restoration. *Northwest Biosolids Management Association*. Lecture conducted from Vancouver Washington..

Rosenfeld, P.E. and Grey, M. A. (November 11-14, 2002). Using High-Carbon Wood Ash to Control Odor at a Green Materials Composting Facility. *Soil Science Society Annual Conference*. Lecture conducted from Indianapolis, Maryland.

Rosenfeld, P.E. (September 16, 2000). Two stage biofilter for biosolids composting odor control. *Water Environment Federation*. Lecture conducted from Anaheim California.

Rosenfeld, P.E. (October 16, 2000). Wood ash and biofilter control of compost odor. *Biofest*. Lecture conducted from Ocean Shores, California.

Rosenfeld, P.E. (2000). Bioremediation Using Organic Soil Amendments. *California Resource Recovery Association*. Lecture conducted from Sacramento California.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. *Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings*. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., and C.L. Henry. (1999). An evaluation of ash incorporation with biosolids for odor reduction. *Soil Science Society of America*. Lecture conducted from Salt Lake City Utah.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Comparison of Microbial Activity and Odor Emissions from Three Different Biosolids Applied to Forest Soil. *Brown and Caldwell*. Lecture conducted from Seattle Washington.

Rosenfeld, P.E., C.L. Henry. (1998). Characterization, Quantification, and Control of Odor Emissions from Biosolids Application To Forest Soil. *Biofest*. Lecture conducted from Lake Chelan, Washington.

Rosenfeld, P.E., C.L. Henry, R. Harrison. (1998). Oat and Grass Seed Germination and Nitrogen and Sulfur Emissions Following Biosolids Incorporation With High-Carbon Wood-Ash. Water Environment Federation 12th Annual Residuals and Biosolids Management Conference Proceedings. Lecture conducted from Bellevue Washington.

Rosenfeld, P.E., C.L. Henry, R. B. Harrison, and R. Dills. (1997). Comparison of Odor Emissions From Three Different Biosolids Applied to Forest Soil. *Soil Science Society of America*. Lecture conducted from Anaheim California.

Teaching Experience:

UCLA Department of Environmental Health (Summer 2003 through 20010) Taught Environmental Health Science 100 to students, including undergrad, medical doctors, public health professionals and nurses. Course focused on the health effects of environmental contaminants.

National Ground Water Association, Successful Remediation Technologies. Custom Course in Sante Fe, New Mexico. May 21, 2002. Focused on fate and transport of fuel contaminants associated with underground storage tanks.

National Ground Water Association; Successful Remediation Technologies Course in Chicago Illinois. April 1, 2002. Focused on fate and transport of contaminants associated with Superfund and RCRA sites.

California Integrated Waste Management Board, April and May, 2001. Alternative Landfill Caps Seminar in San Diego, Ventura, and San Francisco. Focused on both prescriptive and innovative landfill cover design.

UCLA Department of Environmental Engineering, February 5, 2002. Seminar on Successful Remediation Technologies focusing on Groundwater Remediation.

University Of Washington, Soil Science Program, Teaching Assistant for several courses including: Soil Chemistry, Organic Soil Amendments, and Soil Stability.

U.C. Berkeley, Environmental Science Program Teaching Assistant for Environmental Science 10.

Academic Grants Awarded:

California Integrated Waste Management Board. \$41,000 grant awarded to UCLA Institute of the Environment. Goal: To investigate effect of high carbon wood ash on volatile organic emissions from compost. 2001.

Synagro Technologies, Corona California: \$10,000 grant awarded to San Diego State University. Goal: investigate effect of biosolids for restoration and remediation of degraded coastal sage soils. 2000.

King County, Department of Research and Technology, Washington State. \$100,000 grant awarded to University of Washington: Goal: To investigate odor emissions from biosolids application and the effect of polymers and ash on VOC emissions. 1998.

Northwest Biosolids Management Association, Washington State. \$20,000 grant awarded to investigate effect of polymers and ash on VOC emissions from biosolids. 1997.

James River Corporation, Oregon: \$10,000 grant was awarded to investigate the success of genetically engineered Poplar trees with resistance to round-up. 1996.

United State Forest Service, Tahoe National Forest: \$15,000 grant was awarded to investigating fire ecology of the Tahoe National Forest. 1995.

Kellogg Foundation, Washington D.C. \$500 grant was awarded to construct a large anaerobic digester on St. Kitts in West Indies. 1993

Deposition and/or Trial Testimony:

- In the United States District Court For The District of New Jersey
Duarte et al, *Plaintiffs*, vs. United States Metals Refining Company et. al. *Defendant*.
Case No.: 2:17-cv-01624-ES-SCM
Rosenfeld Deposition. 6-7-2019
- In the United States District Court of Southern District of Texas Galveston Division
M/T Carla Maersk, *Plaintiffs*, vs. Conti 168., Schiffahrts-GMBH & Co. Bulker KG MS “Conti Perdido”
Defendant.
Case No.: 3:15-CV-00106 consolidated with 3:15-CV-00237
Rosenfeld Deposition. 5-9-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
Carole-Taddeo-Bates et al., vs. Ifran Khan et al., Defendants
Case No.: No. BC615636
Rosenfeld Deposition, 1-26-2019
- In The Superior Court of the State of California In And For The County Of Los Angeles – Santa Monica
The San Gabriel Valley Council of Governments et al. vs El Adobe Apts. Inc. et al., Defendants
Case No.: No. BC646857
Rosenfeld Deposition, 10-6-2018; Trial 3-7-19
- In United States District Court For The District of Colorado
Bells et al. Plaintiff vs. The 3M Company et al., Defendants
Case: No 1:16-cv-02531-RBJ
Rosenfeld Deposition, 3-15-2018 and 4-3-2018
- In The District Court Of Regan County, Texas, 112th Judicial District
Phillip Bales et al., Plaintiff vs. Dow Agrosiences, LLC, et al., Defendants
Cause No 1923
Rosenfeld Deposition, 11-17-2017
- In The Superior Court of the State of California In And For The County Of Contra Costa
Simons et al., Plaintiffs vs. Chevron Corporation, et al., Defendants
Cause No C12-01481
Rosenfeld Deposition, 11-20-2017
- In The Circuit Court Of The Twentieth Judicial Circuit, St Clair County, Illinois
Martha Custer et al., Plaintiff vs. Cerro Flow Products, Inc., Defendants
Case No.: No. 0i9-L-2295
Rosenfeld Deposition, 8-23-2017
- In The Superior Court of the State of California, For The County of Los Angeles
Warrn Gilbert and Penny Gilber, Plaintiff vs. BMW of North America LLC
Case No.: LC102019 (c/w BC582154)
Rosenfeld Deposition, 8-16-2017, Trail 8-28-2018
- In the Northern District Court of Mississippi, Greenville Division
Brenda J. Cooper, et al., *Plaintiffs*, vs. Meritor Inc., et al., *Defendants*
Case Number: 4:16-cv-52-DMB-JVM
Rosenfeld Deposition: July 2017

In The Superior Court of the State of Washington, County of Snohomish
Michael Davis and Julie Davis et al., Plaintiff vs. Cedar Grove Composting Inc., Defendants
Case No.: No. 13-2-03987-5
Rosenfeld Deposition, February 2017
Trial, March 2017

In The Superior Court of the State of California, County of Alameda
Charles Spain., Plaintiff vs. Thermo Fisher Scientific, et al., Defendants
Case No.: RG14711115
Rosenfeld Deposition, September 2015

In The Iowa District Court In And For Poweshiek County
Russell D. Winburn, et al., Plaintiffs vs. Doug Hoksbergen, et al., Defendants
Case No.: LALA002187
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Jerry Dovico, et al., Plaintiffs vs. Valley View Sine LLC, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Iowa District Court For Wapello County
Doug Pauls, et al., et al., Plaintiffs vs. Richard Warren, et al., Defendants
Law No.: LALA105144 - Division A
Rosenfeld Deposition, August 2015

In The Circuit Court of Ohio County, West Virginia
Robert Andrews, et al. v. Antero, et al.
Civil Action NO. 14-C-30000
Rosenfeld Deposition, June 2015

In The Third Judicial District County of Dona Ana, New Mexico
Betty Gonzalez, et al. Plaintiffs vs. Del Oro Dairy, Del Oro Real Estate LLC, Jerry Settles and Deward
DeRuyter, Defendants
Rosenfeld Deposition: July 2015

In The Iowa District Court For Muscatine County
Laurie Freeman et. al. Plaintiffs vs. Grain Processing Corporation, Defendant
Case No 4980
Rosenfeld Deposition: May 2015

In the Circuit Court of the 17th Judicial Circuit, in and For Broward County, Florida
Walter Hinton, et. al. Plaintiff, vs. City of Fort Lauderdale, Florida, a Municipality, Defendant.
Case Number CACE07030358 (26)
Rosenfeld Deposition: December 2014

In the United States District Court Western District of Oklahoma
Tommy McCarty, et al., Plaintiffs, v. Oklahoma City Landfill, LLC d/b/a Southeast Oklahoma City
Landfill, et al. Defendants.
Case No. 5:12-cv-01152-C
Rosenfeld Deposition: July 2014

In the County Court of Dallas County Texas
Lisa Parr et al, *Plaintiff*, vs. Aruba et al, *Defendant*.
Case Number cc-11-01650-E
Rosenfeld Deposition: March and September 2013
Rosenfeld Trial: April 2014

In the Court of Common Pleas of Tuscarawas County Ohio
John Michael Abicht, et al., *Plaintiffs*, vs. Republic Services, Inc., et al., *Defendants*
Case Number: 2008 CT 10 0741 (Cons. w/ 2009 CV 10 0987)
Rosenfeld Deposition: October 2012

In the United States District Court of Southern District of Texas Galveston Division
Kyle Cannon, Eugene Donovan, Genaro Ramirez, Carol Sassler, and Harvey Walton, each Individually and on behalf of those similarly situated, *Plaintiffs*, vs. BP Products North America, Inc., *Defendant*.
Case 3:10-cv-00622
Rosenfeld Deposition: February 2012
Rosenfeld Trial: April 2013

In the Circuit Court of Baltimore County Maryland
Philip E. Cvach, II et al., *Plaintiffs* vs. Two Farms, Inc. d/b/a Royal Farms, Defendants
Case Number: 03-C-12-012487 OT
Rosenfeld Deposition: September 2013

EXHIBIT C



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Matthew F. Hagemann, P.G., C.Hg., QSD, QSP

**Geologic and Hydrogeologic Characterization
Industrial Stormwater Compliance
Investigation and Remediation Strategies
Litigation Support and Testifying Expert
CEQA Review**

Education:

M.S. Degree, Geology, California State University Los Angeles, Los Angeles, CA, 1984.

B.A. Degree, Geology, Humboldt State University, Arcata, CA, 1982.

Professional Certifications:

California Professional Geologist

California Certified Hydrogeologist

Qualified SWPPP Developer and Practitioner

Professional Experience:

Matt has 25 years of experience in environmental policy, assessment and remediation. He spent nine years with the U.S. EPA in the RCRA and Superfund programs and served as EPA's Senior Science Policy Advisor in the Western Regional Office where he identified emerging threats to groundwater from perchlorate and MTBE. While with EPA, Matt also served as a Senior Hydrogeologist in the oversight of the assessment of seven major military facilities undergoing base closure. He led numerous enforcement actions under provisions of the Resource Conservation and Recovery Act (RCRA) while also working with permit holders to improve hydrogeologic characterization and water quality monitoring.

Matt has worked closely with U.S. EPA legal counsel and the technical staff of several states in the application and enforcement of RCRA, Safe Drinking Water Act and Clean Water Act regulations. Matt has trained the technical staff in the States of California, Hawaii, Nevada, Arizona and the Territory of Guam in the conduct of investigations, groundwater fundamentals, and sampling techniques.

Positions Matt has held include:

- Founding Partner, Soil/Water/Air Protection Enterprise (SWAPE) (2003 – present);
- Geology Instructor, Golden West College, 2010 – 2014;
- Senior Environmental Analyst, Komex H2O Science, Inc. (2000 -- 2003);

- Executive Director, Orange Coast Watch (2001 – 2004);
- Senior Science Policy Advisor and Hydrogeologist, U.S. Environmental Protection Agency (1989–1998);
- Hydrogeologist, National Park Service, Water Resources Division (1998 – 2000);
- Adjunct Faculty Member, San Francisco State University, Department of Geosciences (1993 – 1998);
- Instructor, College of Marin, Department of Science (1990 – 1995);
- Geologist, U.S. Forest Service (1986 – 1998); and
- Geologist, Dames & Moore (1984 – 1986).

Senior Regulatory and Litigation Support Analyst:

With SWAPE, Matt’s responsibilities have included:

- Lead analyst and testifying expert in the review of over 100 environmental impact reports since 2003 under CEQA that identify significant issues with regard to hazardous waste, water resources, water quality, air quality, Valley Fever, greenhouse gas emissions, and geologic hazards. Make recommendations for additional mitigation measures to lead agencies at the local and county level to include additional characterization of health risks and implementation of protective measures to reduce worker exposure to hazards from toxins and Valley Fever.
- Stormwater analysis, sampling and best management practice evaluation at industrial facilities.
- Manager of a project to provide technical assistance to a community adjacent to a former Naval shipyard under a grant from the U.S. EPA.
- Technical assistance and litigation support for vapor intrusion concerns.
- Lead analyst and testifying expert in the review of environmental issues in license applications for large solar power plants before the California Energy Commission.
- Manager of a project to evaluate numerous formerly used military sites in the western U.S.
- Manager of a comprehensive evaluation of potential sources of perchlorate contamination in Southern California drinking water wells.
- Manager and designated expert for litigation support under provisions of Proposition 65 in the review of releases of gasoline to sources drinking water at major refineries and hundreds of gas stations throughout California.
- Expert witness on two cases involving MTBE litigation.
- Expert witness and litigation support on the impact of air toxins and hazards at a school.
- Expert witness in litigation at a former plywood plant.

With Komex H2O Science Inc., Matt’s duties included the following:

- Senior author of a report on the extent of perchlorate contamination that was used in testimony by the former U.S. EPA Administrator and General Counsel.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of MTBE use, research, and regulation.
- Senior researcher in the development of a comprehensive, electronically interactive chronology of perchlorate use, research, and regulation.
- Senior researcher in a study that estimates nationwide costs for MTBE remediation and drinking water treatment, results of which were published in newspapers nationwide and in testimony against provisions of an energy bill that would limit liability for oil companies.
- Research to support litigation to restore drinking water supplies that have been contaminated by MTBE in California and New York.

- Expert witness testimony in a case of oil production-related contamination in Mississippi.
- Lead author for a multi-volume remedial investigation report for an operating school in Los Angeles that met strict regulatory requirements and rigorous deadlines.

- Development of strategic approaches for cleanup of contaminated sites in consultation with clients and regulators.

Executive Director:

As Executive Director with Orange Coast Watch, Matt led efforts to restore water quality at Orange County beaches from multiple sources of contamination including urban runoff and the discharge of wastewater. In reporting to a Board of Directors that included representatives from leading Orange County universities and businesses, Matt prepared issue papers in the areas of treatment and disinfection of wastewater and control of the discharge of grease to sewer systems. Matt actively participated in the development of countywide water quality permits for the control of urban runoff and permits for the discharge of wastewater. Matt worked with other nonprofits to protect and restore water quality, including Surfrider, Natural Resources Defense Council and Orange County CoastKeeper as well as with business institutions including the Orange County Business Council.

Hydrogeology:

As a Senior Hydrogeologist with the U.S. Environmental Protection Agency, Matt led investigations to characterize and cleanup closing military bases, including Mare Island Naval Shipyard, Hunters Point Naval Shipyard, Treasure Island Naval Station, Alameda Naval Station, Moffett Field, Mather Army Airfield, and Sacramento Army Depot. Specific activities were as follows:

- Led efforts to model groundwater flow and contaminant transport, ensured adequacy of monitoring networks, and assessed cleanup alternatives for contaminated sediment, soil, and groundwater.
- Initiated a regional program for evaluation of groundwater sampling practices and laboratory analysis at military bases.
- Identified emerging issues, wrote technical guidance, and assisted in policy and regulation development through work on four national U.S. EPA workgroups, including the Superfund Groundwater Technical Forum and the Federal Facilities Forum.

At the request of the State of Hawaii, Matt developed a methodology to determine the vulnerability of groundwater to contamination on the islands of Maui and Oahu. He used analytical models and a GIS to show zones of vulnerability, and the results were adopted and published by the State of Hawaii and County of Maui.

As a hydrogeologist with the EPA Groundwater Protection Section, Matt worked with provisions of the Safe Drinking Water Act and NEPA to prevent drinking water contamination. Specific activities included the following:

- Received an EPA Bronze Medal for his contribution to the development of national guidance for the protection of drinking water.
- Managed the Sole Source Aquifer Program and protected the drinking water of two communities through designation under the Safe Drinking Water Act. He prepared geologic reports, conducted public hearings, and responded to public comments from residents who were very concerned about the impact of designation.

- Reviewed a number of Environmental Impact Statements for planned major developments, including large hazardous and solid waste disposal facilities, mine reclamation, and water transfer.

Matt served as a hydrogeologist with the RCRA Hazardous Waste program. Duties were as follows:

- Supervised the hydrogeologic investigation of hazardous waste sites to determine compliance with Subtitle C requirements.
- Reviewed and wrote "part B" permits for the disposal of hazardous waste.
- Conducted RCRA Corrective Action investigations of waste sites and led inspections that formed the basis for significant enforcement actions that were developed in close coordination with U.S. EPA legal counsel.
- Wrote contract specifications and supervised contractor's investigations of waste sites.

With the National Park Service, Matt directed service-wide investigations of contaminant sources to prevent degradation of water quality, including the following tasks:

- Applied pertinent laws and regulations including CERCLA, RCRA, NEPA, NRDA, and the Clean Water Act to control military, mining, and landfill contaminants.
- Conducted watershed-scale investigations of contaminants at parks, including Yellowstone and Olympic National Park.
- Identified high-levels of perchlorate in soil adjacent to a national park in New Mexico and advised park superintendent on appropriate response actions under CERCLA.
- Served as a Park Service representative on the Interagency Perchlorate Steering Committee, a national workgroup.
- Developed a program to conduct environmental compliance audits of all National Parks while serving on a national workgroup.
- Co-authored two papers on the potential for water contamination from the operation of personal watercraft and snowmobiles, these papers serving as the basis for the development of nation-wide policy on the use of these vehicles in National Parks.
- Contributed to the Federal Multi-Agency Source Water Agreement under the Clean Water Action Plan.

Policy:

Served senior management as the Senior Science Policy Advisor with the U.S. Environmental Protection Agency, Region 9. Activities included the following:

- Advised the Regional Administrator and senior management on emerging issues such as the potential for the gasoline additive MTBE and ammonium perchlorate to contaminate drinking water supplies.
- Shaped EPA's national response to these threats by serving on workgroups and by contributing to guidance, including the Office of Research and Development publication, *Oxygenates in Water: Critical Information and Research Needs*.
- Improved the technical training of EPA's scientific and engineering staff.
- Earned an EPA Bronze Medal for representing the region's 300 scientists and engineers in negotiations with the Administrator and senior management to better integrate scientific principles into the policy-making process.
- Established national protocol for the peer review of scientific documents.

Geology:

With the U.S. Forest Service, Matt led investigations to determine hillslope stability of areas proposed for timber harvest in the central Oregon Coast Range. Specific activities were as follows:

- Mapped geology in the field, and used aerial photographic interpretation and mathematical models to determine slope stability.
- Coordinated his research with community members who were concerned with natural resource protection.
- Characterized the geology of an aquifer that serves as the sole source of drinking water for the city of Medford, Oregon.

As a consultant with Dames and Moore, Matt led geologic investigations of two contaminated sites (later listed on the Superfund NPL) in the Portland, Oregon, area and a large hazardous waste site in eastern Oregon. Duties included the following:

- Supervised year-long effort for soil and groundwater sampling.
- Conducted aquifer tests.
- Investigated active faults beneath sites proposed for hazardous waste disposal.

Teaching:

From 1990 to 1998, Matt taught at least one course per semester at the community college and university levels:

- At San Francisco State University, held an adjunct faculty position and taught courses in environmental geology, oceanography (lab and lecture), hydrogeology, and groundwater contamination.
- Served as a committee member for graduate and undergraduate students.
- Taught courses in environmental geology and oceanography at the College of Marin.

Matt taught physical geology (lecture and lab and introductory geology at Golden West College in Huntington Beach, California from 2010 to 2014.

Invited Testimony, Reports, Papers and Presentations:

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Presentation to the Public Environmental Law Conference, Eugene, Oregon.

Hagemann, M.F., 2008. Disclosure of Hazardous Waste Issues under CEQA. Invited presentation to U.S. EPA Region 9, San Francisco, California.

Hagemann, M.F., 2005. Use of Electronic Databases in Environmental Regulation, Policy Making and Public Participation. Brownfields 2005, Denver, Colorado.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Nevada and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Las Vegas, NV (served on conference organizing committee).

Hagemann, M.F., 2004. Invited testimony to a California Senate committee hearing on air toxins at schools in Southern California, Los Angeles.

Brown, A., Farrow, J., Gray, A. and **Hagemann, M.**, 2004. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to the Ground Water and Environmental Law Conference, National Groundwater Association.

Hagemann, M.F., 2004. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in Arizona and the Southwestern U.S. Presentation to a meeting of the American Groundwater Trust, Phoenix, AZ (served on conference organizing committee).

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River and Impacts to Drinking Water in the Southwestern U.S. Invited presentation to a special committee meeting of the National Academy of Sciences, Irvine, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a tribal EPA meeting, Pechanga, CA.

Hagemann, M.F., 2003. Perchlorate Contamination of the Colorado River. Invited presentation to a meeting of tribal representatives, Parker, AZ.

Hagemann, M.F., 2003. Impact of Perchlorate on the Colorado River and Associated Drinking Water Supplies. Invited presentation to the Inter-Tribal Meeting, Torres Martinez Tribe.

Hagemann, M.F., 2003. The Emergence of Perchlorate as a Widespread Drinking Water Contaminant. Invited presentation to the U.S. EPA Region 9.

Hagemann, M.F., 2003. A Deductive Approach to the Assessment of Perchlorate Contamination. Invited presentation to the California Assembly Natural Resources Committee.

Hagemann, M.F., 2003. Perchlorate: A Cold War Legacy in Drinking Water. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. From Tank to Tap: A Chronology of MTBE in Groundwater. Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. A Chronology of MTBE in Groundwater and an Estimate of Costs to Address Impacts to Groundwater. Presentation to the annual meeting of the Society of Environmental Journalists.

Hagemann, M.F., 2002. An Estimate of the Cost to Address MTBE Contamination in Groundwater (and Who Will Pay). Presentation to a meeting of the National Groundwater Association.

Hagemann, M.F., 2002. An Estimate of Costs to Address MTBE Releases from Underground Storage Tanks and the Resulting Impact to Drinking Water Wells. Presentation to a meeting of the U.S. EPA and State Underground Storage Tank Program managers.

Hagemann, M.F., 2001. From Tank to Tap: A Chronology of MTBE in Groundwater. Unpublished report.

Hagemann, M.F., 2001. Estimated Cleanup Cost for MTBE in Groundwater Used as Drinking Water. Unpublished report.

Hagemann, M.F., 2001. Estimated Costs to Address MTBE Releases from Leaking Underground Storage Tanks. Unpublished report.

Hagemann, M.F., and VanMouwerik, M., 1999. Potential Water Quality Concerns Related to Snowmobile Usage. Water Resources Division, National Park Service, Technical Report.

VanMouwerik, M. and **Hagemann, M.F.** 1999, Water Quality Concerns Related to Personal Watercraft Usage. Water Resources Division, National Park Service, Technical Report.

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Hagemann, M.F., 1993. U.S. EPA Policy on the Technical Impracticability of the Cleanup of DNAPL-contaminated Groundwater. California Groundwater Resources Association Meeting.

Hagemann, M.F., 1992. Dense Nonaqueous Phase Liquid Contamination of Groundwater: An Ounce of Prevention... Proceedings, Association of Engineering Geologists Annual Meeting, v. 35.

Other Experience:

Selected as subject matter expert for the California Professional Geologist licensing examination, 2009-2011.

From: [Corrie Chitlik](#)
To: [Samaras, Paul](#)
Cc: barbara.boland@mac.com; [Tracey Miller-Zarneke](#)
Subject: Public Comment: Downtown Specific Plan Update
Date: Thursday, January 12, 2023 11:33:26 AM

To Whom it May Concern,

Please consider incorporating sea-cliff buckwheat plants into your landscaping design. This is the only food the native El Segundo Blue Butterfly eats. It would also be neat to have signage for the general public which would explain the native habitat (Culture Development Fund to pay for signage).

Can you also please consider solar and battery backup power, or alternative zero emission or ultra low emission options (linear generator, fuel cell, etc.). El Segundo should focus on micro grids so our town has resiliency. This also helps reduce our carbon footprint, as needed under our Climate Action Plan.

Best regards,

Corrie Zupo



**APPENDIX B: EL SEGUNDO DOWNTOWN
SPECIFIC PLAN UPDATE**



EL SEGUNDO

Downtown Specific Plan



November 2023
Public Review Draft



Acknowledgments

CITY COUNCIL

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Carol Pirsztuk, Councilmember
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Lance Giroux, Councilmember

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Introduction and Vision



CHAPTER 1: INTRODUCTION AND VISION

A. Introduction

1. Purpose and Intent

The purpose of the Specific Plan is to establish a vision for future development and revitalization, beautification, improved mobility, streetscape, and pedestrian improvements to better serve residents and visitors alike. It envisions the continuation and expansion of the existing neighborhood serving commercial and residential uses, in an enhanced environment, while maintaining the “small-town” atmosphere. The Specific Plan carries forward the community’s goals and vision for Downtown El Segundo.



The Specific Plan envisions enhancements and beautification improvements that will revitalize the streetscape, public plazas, and pedestrian environment while maintaining the existing “small-town” charm and atmosphere.

a. What is a Specific Plan?

In the State of California, a specific plan is one of the many tools for implementing the goals and of a General Plan. Specific plans implement a city or county's general plan through the development of policies, programs, and regulations for a localized area and in greater detail. Specific plans are put in place to regulate distinct character areas that cannot be regulated through general ordinance or city-wide zoning. A specific plan establishes a link between implementing policies of the General Plan and the individual development proposals in a defined area within the City.

The Downtown Specific Plan is a document designed to implement the goals and policies of the El Segundo General Plan to implement the City's long-term vision for the Downtown. As its primary purpose, a Specific Plan provides mechanisms to target implementation measures toward a specific planning area while preserving and enhancing areas of historical or architectural significance. A Specific Plan provides a customized regulatory framework that contains detailed development standards and regulations, distribution of land uses, infrastructure requirements, and implementation measures for the development of a specific geographic area. Civic-oriented, pedestrian-oriented, and mixed-use development (housing over commercial) may be included as part of a Specific Plan.

The Specific Plan is similar in nature to the Municipal Code because it deals with implementation using development regulations. Unlike the citywide Municipal Code, Specific Plans are targeted to specific planning areas. This allows for both greater flexibility and more specificity to focus regulations and standards to achieve specific strategies and Specific Plans take precedence over the Municipal Code regulations. The Specific Plan provisions provide a greater level of assurance to prospective developers and the development community relative to the City's long-term goals for a specific geographic area. Where a provision in this Specific Plan does not address a specific condition or situation that arises, the provisions set forth in the Municipal Code shall apply. In the event of a conflict between these provisions and the provisions of the Municipal Code, the provisions set forth in the Downtown Specific Plan shall govern.

This Specific Plan governs all land within the plan boundary. Private property is governed by land use requirements and developments standards contained within Chapter 2 and the public realm and infrastructure improvements are regulated by other chapters. The land uses, development standards and regulations are important aspects of a Specific Plan since they implement the goals and policies of the General Plan. Actual development proposals, building placement, and design will come through private investment following the adoption of the Specific Plan.

b. Specific Plan Area Overview

Location

The Specific Plan area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo, which is approximately 20 miles southwest from downtown Los Angeles (see Figure 1.1 Regional Setting). Downtown El Segundo is located southwest of the interchange of the Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. The Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of the Imperial Highway. It is bounded by Mariposa Avenue to the north and El Segundo Boulevard to the south. The Los Angeles International Airport (LAX) is located to the north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east; the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west.



Figure 1.1 **Regional Setting**

Existing Characteristics and Context

The Downtown remains a small, distinct area within El Segundo and most of the Specific Plan area includes a range of neighborhood service commercial uses including retail, restaurants, offices, and banks; and there are some existing civic uses and residential units. Existing development within the Specific Plan area ranges from one- to three-story buildings, with many buildings located along or near the front property line at one to two-story heights and a few three-story buildings. The Specific Plan area is generally gently sloping with some steeper topography along portions Main Street and the Marketplace Alley.

The Specific Plan area is divided by two principal streets running in a north-south orientation, Main Street and Richmond Street, and contains portions of lesser traveled Standard Street and Concord Street (see Figure 1.2 Project Location). Two major streets cross in an east-west orientation, Grand Avenue and El Segundo Boulevard, as do sections of four smaller streets: Franklin Avenue, Holly Avenue, Pine Avenue, and Mariposa Avenue. Main Street, Grand Avenue, and El Segundo Boulevard each connect to major, regional arterials or freeways. Main Street runs between El Segundo Boulevard and Imperial Highway, which borders Los Angeles International Airport. El Segundo Boulevard, on the southern boundary of the Specific Plan area, connects to the I-405 Freeway and to Pacific Coast Highway. Grand Avenue links to Pacific Coast Highway to the east and the coastline to the west.

Surrounding Land Uses

The land uses surrounding the Specific Plan area are generally residential in nature, ranging from one to three stories in height in a fully developed urban environment.

North

The El Segundo High School campus, El Segundo Public Library, and Library Park are located just north of the Specific Plan area on Main Street. The neighborhoods surrounding these civic uses are comprised mainly of single-family dwellings, duplexes, and apartment complexes.

West

An area zoned Neighborhood Commercial (C-2) is located just west of the Specific Plan area. Less than a mile from the western edge of the Specific Plan is the Pacific Ocean coastline. Both Dockweiler Beach and El Segundo Beach are primarily accessed via Grand Avenue, which runs east-west through the city. The neighborhoods between Downtown El Segundo and the coast are comprised mainly of single-family dwellings, duplexes, and apartment complexes.

South

South of El Segundo Boulevard is the Chevron Refinery, which is zoned Heavy Industrial (M-2) and covers over 1,000 acres of land.

East

The neighborhoods to the east of the Specific Plan area are comprised of a mix of single-family dwellings, duplexes, and apartment complexes. The areas south and east of the Specific Plan area contain the Smoky Hollow Specific Plan which are developed with light industrial, and office uses. El Segundo Recreation Park, located along Pine Avenue and Eucalyptus Drive, provides recreational facilities for a range of sports, including softball, roller hockey, tennis, and basketball.

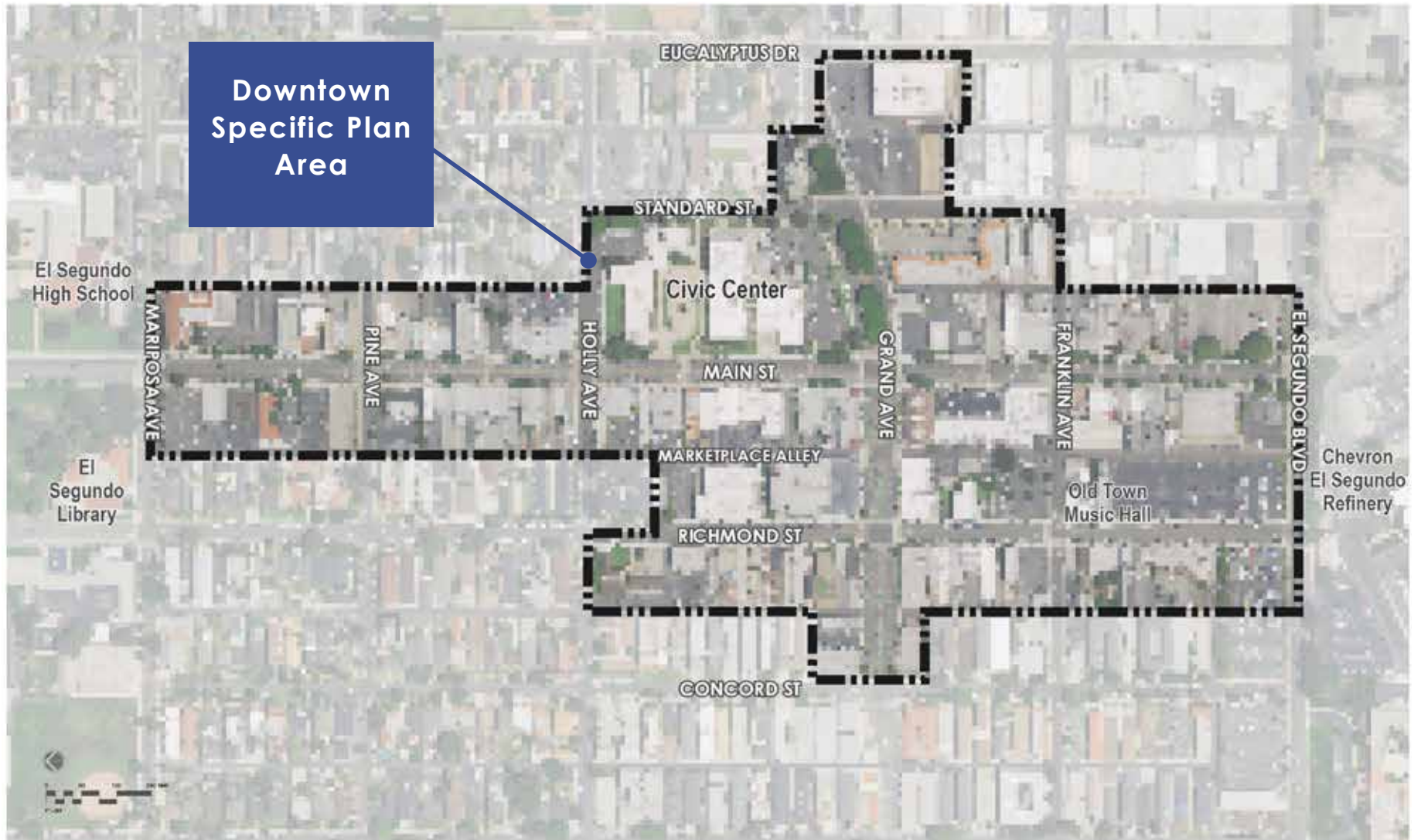


Figure 1.2 **Project Location**

B. Relationship to Other Planning Documents

This section briefly discusses key documents and policies considered in the formulation of the Specific Plan.

El Segundo Downtown Specific Plan (2000)

This Specific Plan is an update to the Downtown Specific Plan which was adopted in 2000 with a 10-year vision. 20 years have passed, and the City is looking to confirm and enhance the vision for Downtown El Segundo. The City of El Segundo identified the need to update the current Specific Plan to create a desired balance of uses within the Downtown to reach its optimal potential while enhancing the small-town charm and quality environment that the residents currently enjoy.

The district boundaries within the 2000 Specific Plan were analyzed and refined based upon existing community values, expected market demand, and shared characteristics, including the vision of range of allowable uses and development standards to support the desired future condition of the districts. The 2000 Specific Plan area was previously divided into six districts and this Specific Plan has adjusted the Specific Plan area into four distinct districts. This Specific Plan updates the goals and objectives of the existing Plan and is based on an approximate 20-year outlook for development and growth in Downtown El Segundo.

El Segundo General Plan

The General Plan is the City's guiding document for decision making and it outlines the City's visions and policies. The Downtown Specific Plan is generally consistent with the General Plan and provides for more precise implementation of goals, objectives, and policies outlined within the General Plan. Highlights of how the Specific Plan furthers General Plan goals are provided below. Please refer to Appendix A for additional information.

- **Economic Development Element:** The Specific Plan strives to preserve and improve the business environment, stabilize the economic viability of the Downtown, enhance the appearance of Downtown, and enhance the pedestrian environment while providing the opportunity for a mix of commercial services.
- **Land Use Element:** The Specific Plan provides for a range of uses that will maintain the "small town" atmosphere, complement the Downtown's historic context, create a sense of place, and encourage landscaping and entry statements.
- **Circulation Element:** The Specific Plan proposes streetscape beautification elements and an improved circulation system in the Downtown which are safe, convenient, and cost effective and can effectively accommodate the mobility needs of bicycles, vehicles, and pedestrians.

- **Housing Element:** The Specific Plan allows for a variety of housing types and uses and establishes standards and policies for residential development.
- **Open Space and Recreation Element:** The Specific Plan addresses the Open Space and Recreation Element objectives and policies related to the development of open space and gathering space and landscaping policies. The Specific Plan provides for the development of open space areas such as plazas and courtyards that activate the Downtown.
- **Conservation Element:** The Specific Plan enhances the quality of the urban landscape of the Downtown, particularly the characteristics and qualities identified by the community as being valued and designates landscaping features for the El Segundo Blue Butterfly.
- **Noise Element:** The Specific Plan requires that the current noise regulations of the Municipal Code be adhered to which address and mitigate potential noise conflicts.

El Segundo Municipal Code

The City of El Segundo's Municipal Code is the main regulatory document that provides specific development regulations that are applicable to individual neighborhoods, districts, and corridors to ensure they are consistent with the General Plan.



The Specific Plan provides for plazas and courtyards that will energize and activate Downtown El Segundo

C. Document Organization

This Specific Plan is organized into seven chapters that discuss public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes. The following describes the contents in more detail:

Chapter 1: Introduction and Vision

The introduction discusses the purpose and organization of this document and the Specific Plan area boundary. This section describes the community's vision for the Specific Plan area, informed by the community engagement process and public hearings. In addition, the Specific Plan's relationship to the City's General Plan and other pertinent City documents and policies are discussed in this chapter.

Chapter 2: Private Realm – Land Use and Development Standards

The Specific Plan uses a district-based approach to govern land uses and development standards. This chapter sets forth general provisions for development within the Specific Plan area and details the permitted land uses and development standards which are customized for each district. The regulations within this chapter will guide growth and development in the Specific Plan area to accommodate a desired mix of uses with guidelines and standards included to create a development form and composition that supports a vibrant, active Downtown shopping district and neighborhood.

Chapter 3: Public Realm – Multimodal Mobility

This chapter provides direction for public mobility improvements for the entire Specific Plan area. Topics include mobility improvements for all modes of travel to promote an efficient and clear path of travel providing connectivity to and within the Specific Plan area and includes recommendations for parking improvements.

Chapter 4: Public Realm – Placemaking and Beautification

This chapter provides direction for public placemaking and beautification improvements for the entire Specific Plan area. Topics include public plazas and gathering areas, street furnishings, landscape concepts, and gateway signage.

Chapter 5: Infrastructure and Public Facilities

This chapter addresses essential infrastructure requirements for future development within the Specific Plan area, including water, sewer, stormwater, solid waste, dry utilities, schools, police, fire, parks, and other public services.

Chapter 6: Implementation

This chapter provides implementation strategies and direction for achieving the goals set forth within the Specific Plan. It identifies key future implementation programs and improvements, as well as priority, phasing, and primary responsible parties for each.

Chapter 7: Administration

This section describes the authority of the Specific Plan, project review procedures, and the administrative procedures required for amendments and/or modifications to the Specific Plan.

D. Vision

Community engagement and analysis of Specific Plan area informed the development of key planning principles and provided the foundation for the Specific Plan.

1. Community Engagement Process

The Specific Plan community outreach effort to discuss goals and objectives, the vision, opportunities and constraints, and important issues in the Downtown and included meetings with citizens, business owners, Rotary Club members, and interested stakeholders.

- Social Pinpoint:** A Social Pinpoint website was created to obtain community input about the Specific Plan area and was open for comments from June 1 to July 18, 2022. The site included an interactive mapping activity which received 237 comments, and a written questionnaire which received 130 responses. The mapping activity allowed the community to “like” or “dislike” a comment to inform consensus.
- Community Workshop:** A Community Workshop was held on June 28, 2022, to provide an overview of the Specific Plan project and process to date and presented a summary of the existing conditions within the Specific Plan area. The workshop included an interactive Slido polling feature that allowed the community to immediately see the voting results on the screen, and optional breakout rooms were provided for additional discussion.



A word cloud from the Social PinPoint mapping activity. The larger the word is shown, the more times it was listed by the community.

DOWNTOWN
SPECIFIC PLAN UPDATE

Shopping EATING DRINKING
EL SEGUNDO
Downtown Specific Plan Update

**PLANNING COMMISSION
STUDY SESSION**

Join us to learn about and provide feedback on the Downtown Specific Plan Update at the Planning Commission meeting!

Over the summer, we have heard from the community and have developed some preliminary concepts regarding future land uses, streetscape beautification, improved mobility, and other enhancements for Downtown El Segundo.
We want to continue to hear from you!

WHEN & WHERE:

NOVEMBER 10 FROM 5:30 - 7:00 PM
In-Person at: City Council Chambers
(350 Main Street)
Virtually via Zoom: Visit the project website for a Zoom link closer to the meeting date

FOR MORE INFO:

VISIT OUR PROJECT WEBSITE!
www.elsegundo.org/downtownupdate
Questions?
Contact: Paul Samaras at
PSamaras@elsegundo.org

CITY OF
EL SEGUNDO

Flyer from the Planning Commission Study Session

- **Planning Commission Study Session:** A public Planning Commission Study Session was held on November 10, 2022 to discuss Specific Plan progress and key concepts. RRM Design Group presented the community outreach results, market demand highlights, proposed Specific Plan districts, Downtown gateway signage concepts, existing parking analysis, parking management strategies and potential future parking structure locations, and the reviewed the Opportunities Map. To receive early decision-maker input, two alternatives were presented for the Civic Center District, and streetscape enhancements were reviewed with road section options for Grand Avenue, Main Street and Richmond Street.

The progress was well received, and the meeting concluded without any recommendations for refinements to the proposed Specific Plan districts or gateway signage concepts. There was a preference for the Central Green option at the Civic Center District and requests to include habitat areas for the El Segundo Blue Butterfly. Chapter 2, Section G, Civic Center District reflects these recommendations.

There was support for reducing travel lanes and providing traffic calming and wider sidewalks for outdoor dining in the Downtown. The Planning Commission asked to consider narrower bike lanes to allow for more pedestrian spaces and requested that parking not be adversely affected by the bike alternatives. The roadway sections shown in Chapter 3, Section E, Vehicular Circulation, reflect these recommendations. The Planning Commission recommended a phased implementation of the Downtown Specific Plan improvements. Chapter 6, Implementation discusses the potential funding sources/mechanisms for implementation.

2. Vision and Planning Principles

The following Downtown Specific Plan vision and planning principles were formulated through extensive community engagement, review of City policies, and analysis of established conditions. The planning principles, policies and standards included in this Specific Plan will collectively implement this shared vision.

VISION

Downtown is the heart of El Segundo, and its vibrant energy will continue to provide an attractive and accessible destination for families of all ages and incomes to stay, play, and relax. The vision of this Specific Plan is to create an economically prosperous Downtown with a mix of uses and entertainment options and cohesive elements that tie the community together. The Specific Plan's goal is to create a balance of uses within the Downtown to reach its optimal potential and will provide direction for streetscape beautification, outdoor gathering spaces, improved mobility, and other enhancements that will establish a unique and inviting environment that highlights its historical and cultural roots to enrich this community destination.



The Specific Plan will provide direction for outdoor gathering spaces and streetscape beautification and will establish a unique and inviting Downtown environment

PLANNING PRINCIPLES

Crafted from community input, the following planning principles shape the guidelines and standards contained in the Specific Plan.

Private Realm - Land Use and Development Standards (refer to Chapter 2)

- **Heart of El Segundo** - Embrace the unique small-town “village” character, pedestrian friendly environment, and historic charm of Downtown and enhance its identity to reflect local interests.
- **Economic Revitalization** - Attract investment and increase the economic vitality of Downtown to foster an active center serving residents, visitors, and local workers.
- **Outdoor Dining** - Create aesthetically pleasing and functional outdoor dining opportunities.
- **Residential Opportunities** - Promote a range of housing options with opportunities for all incomes.

Public Realm - Multimodal Mobility (refer to Chapter 3)

- **Expanded Mobility** - Support enhanced and efficient mobility opportunities for walking, driving, bicycling, and transit.
- **Pedestrians and Bicycles** - Improve walkability and the pedestrian environment and encourage bicycle use with additional bicycle improvements and amenities.
- **Improved Public Parking** - Develop a comprehensive parking plan with increased parking wayfinding signage and facilitate innovative methods for parking such as shared parking agreements.

Public Realm - Placemaking and Beautification (refer to Chapter 4)

- **Designate the Core** - Enhance the entrances and gateways into Downtown and develop the Civic Center Plaza as a focal point for the community with activities for all ages.
- **Entertainment and Arts** - Provide attractive multi-use public spaces enhanced with public art for events, entertainment, socializing, and playing.
- **Streetscape Beautification** - Ensure an enjoyable, comfortable, and beautified public realm with high-quality amenities and additional shaded seating and gathering areas.



2

Private Realm - Land Use and Development Standards



CHAPTER 2: PRIVATE REALM - LAND USE AND DEVELOPMENT STANDARDS

A. Introduction

The private realm includes all privately owned property in the Downtown Specific Plan area. This chapter provides direction for development through regulatory tools and guidelines established to shape the design character envisioned by the community. Permitted land uses and development standards are regulatory tools that guide new development as well as the re-use of existing buildings. They apply to building additions, exterior remodels, relocations, or new construction requiring a building permit within the Downtown Specific Plan area.

The land use and development standards presented in this chapter will help guide change toward achieving the overall Downtown vision and will provide direction for the types of uses that should occur, and how these uses will be allowed to develop in each area of the Downtown. They are also designed to reinforce the Planning Principles established within Chapter 1 of this document.

Planning Principles Related to Private Realm - Land Use and Development Standards:

- Heart of El Segundo** - Embrace the unique small-town “village” character, pedestrian friendly environment, and historic charm of Downtown and enhance its identity to reflect local interests.
- Economic Revitalization** - Attract investment and increase the economic vitality of Downtown to foster an active center serving residents, visitors, and local workers.
- Outdoor Dining** - Create aesthetically pleasing and functional outdoor dining opportunities.
- Residential Opportunities** - Promote a range of housing options with opportunities for all incomes.

B. District Based Approach

This Specific Plan utilized a mixed-use zoning approach to re-invigorate the Downtown as a focal point of activity, as advocated by the General Plan, and to meet the goals envisioned by the community to develop an inviting and pedestrian-friendly realm. In contrast to the single-use zoning based on land use type, this Specific Plan is based on geographic areas called planning districts and each district has a distinctive vision and a customized range of uses and development standards that support the preferred future vision for the Downtown. The district-based approach allows a “mixed-use” zoning approach where the desired activities and building forms dictate what happens where and what development looks like.

C. Using This Chapter

Before new development occurs, this chapter must be reviewed to determine which district the property is located within and whether the proposed land use is allowed. Once it is determined that a land use is allowed, refer to the specific district development standards based upon your property location. Projects within the Downtown Specific Plan must also comply with the applicable requirements of the ESMC.

1. El Segundo Downtown Districts

The District boundaries were determined based upon shared characteristics including land use commonalities, parcel size, proximity to community-wide destinations, and redevelopment potential. A hybrid approach to zoning is used which combines form-based development standards with a selection of compatible uses that have been tailored for each Specific Plan District (see Figure 2.1, Downtown Specific Plan District Map).

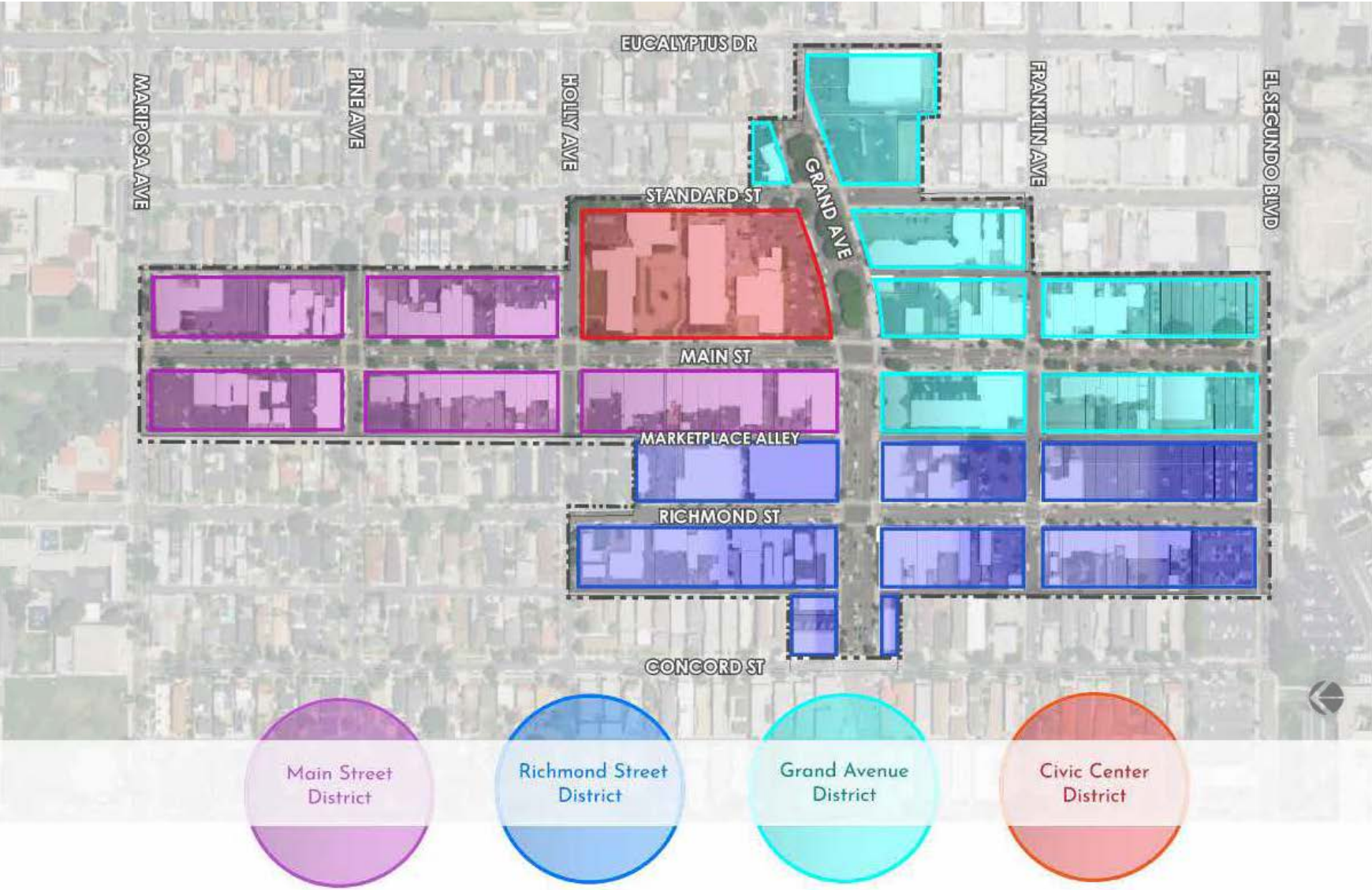


Figure 2.1 *Downtown Specific Plan District Map*

2. Land Use Regulations

Land Uses are selected to encourage reinvestment and revitalization of each Downtown District consistent with its vision and in support of the planning principles that guide Specific Plan. Each District contains a list of Permitted Uses as well as others that may be subject to special conditions regarding the location, operation, design, or special permitting requirements. Following an application submittal, the Director of Community Development or his or her designee shall make a determination as to whether the proposed use is permitted, conditionally permitted, prohibited, or allowed as a temporary or accessory use to a permitted use. Any use not specifically listed in Table 2-1, Permitted Land Use Table, shall be interpreted as not allowed in the Downtown Specific Plan area, except where deemed permissible per Chapter 7, Section D.4, Allowable Land Uses. Refer to Chapter 7 for a list of projects that might require Design Review approval.

- *A Permitted Use (P)* is allowed without discretionary approval and subject to all applicable provisions of this Specific Plan.
- *An Administrative Use Permit (AUP)* requires discretionary approval authorized by the Director of Community Development and subject to the requirements outlined in ESMC Chapter 22, Section 15-22-3.
- **A Conditional Permitted Use (CUP)** requires discretionary approval in the form of a Conditional Use Permit authorized by the Planning Commission and subject to the requirements outlined in ESMC Chapter 23, Section 15-23-2.
- *An Accessory Use (A)* refers to a use that is incidental and subordinate to a primary use of the land or building and located on the same lot with the primary use or building, as outlined in ESMC Chapter 23, Section 15-10-3.
- *Prohibited Uses (–)* are specifically not allowed in a particular zoning district.
- *Uses only permitted above or behind primary street ground floor uses* are allowed in these areas.
- Primary uses not listed in Table 2-1 are not permitted unless determined to be substantially similar to a listed use by the Director. Where a proposed land use is not listed, but is largely similar to one of the listed uses, the process set forth in the ESMC Chapter 15-22 shall apply.
- All existing nonconforming uses that are listed as prohibited in this chapter shall be subject to the provisions outlined in ESMC Chapter 15-21.
- Use definitions are contained within ESMC Section 15-1-6 and Appendix B of this Specific Plan.

Table 2-1: Permitted Use Table

P= Permitted Use
 A= Accessory Use
 AUP = Administrative Use Permit
 CUP = Conditional Use Permit
 (--)= Prohibited Use
 (1) = Uses only permitted above or behind primary street ground floor uses

LAND USES	DISTRICTS			
	Main Street District	Richmond Street District	Grand Avenue District	Civic Center District
Alcohol Sales, Off-Site	AUP	AUP	AUP	AUP
Alcohol Sales, On-Site without Food Service (Bars)	AUP	AUP	AUP	AUP
Alcohol Sales, On-Site with Food Service	P	AUP	AUP	AUP
Artistic or Cultural Services	P	P	AUP	P
Assembly Halls	--	CUP	--	P
Bed and Breakfast Inn	P	P	--	--
Brewery and Alcohol Production (including on-site consumption or restaurant)	--	AUP	AUP	--
Commercial, Financial Institutions	P (1)	P	P	--
Commercial, Retail Sales	P	P	P	P
Commercial, Retail Services	P	P	P	P
Daycare Centers	P (1)	P (1)	CUP	CUP
Dwelling, Multiple-Family	P (1)	P	P	--
Dwelling, Senior Citizen Housing	--	P	P	--
Entertainment (Live)^a	A	A	A	A

a. Entertainment Facilities are subject to an Entertainment Permit pursuant to ESMC Chapter 4-8.

(Continued on next page)

Table 2-1: Permitted Use Table (Continued)

P= Permitted Use
 A= Accessory Use
 AUP = Administrative Use Permit
 CUP = Conditional Use Permit
 (--)= Prohibited Use
 (1) = Uses only permitted above or behind primary street ground floor uses

LAND USES	DISTRICTS			
	Main Street District	Richmond Street District	Grand Avenue District	Civic Center District
Fitness Center^b	P	P (1)	P	--
Hotel	--	--	P	--
Live/ Work	P (1)	P	P	--
Movie Theater and Entertainment Facilities^a	P	P	--	--
Museum	--	P	--	P
Nightclubs	--	--	--	--
Offices, General	P (1)	P	P	--
Office, Medical-Dental	P (1)	P (1)	P	--
Outdoor Dining (Subject to design review and compliance with Chapter 2, Section H.8 of this Specific Plan and El Segundo Municipal Code §15-2-15, Outdoor Dining Areas)	P	P	P	P

Note: General Offices, Medical-Dental Offices, and other uses permitted elsewhere in the Downtown Specific Plan may be allowed as primary street ground floor uses subject to approval of an Administrative Use Permit (AUP) pursuant to Chapter 7, Section D (Allowable Land Uses) of this Specific Plan.

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a. Entertainment Facilities are subject to an Entertainment Permit pursuant to ESMC Chapter 4-8.

b. Fitness Centers may not exceed 5,000 s.f. of gross floor area.

Table 2-1: Permitted Use Table (Continued)

P= Permitted Use
 A= Accessory Use
 AUP = Administrative Use Permit
 CUP = Conditional Use Permit
 (--)= Prohibited Use
 (1) = Uses only permitted above or behind primary street ground floor uses

LAND USES	DISTRICTS			
	Main Street District	Richmond Street District	Grand Avenue District	Civic Center District
Parklets^c	P	P	P	P
Public Facilities	--	--	--	P
Recreational Facilities (Indoor Only)^d	P	P	P	--
Restaurant, Food To Go	P	P	P	AUP
Restaurant, Full Service	P	P	P	P
Studio/Sound Stages and Support Facilities	--	P (1)	--	--
Temporary Outdoor Retail Sales Events	P	P	P	P
Theater	P (1)	P	--	P
Underground Parking Facilities and Parking Structures	P (1)	P	P	P
OTHER				
Any use customarily incidental to a permitted use	A	A	A	A
Other similar uses approved by the Director of Community Development, as provided by Chapter 22 (Title 15 Zoning Regulations)	P, A, AUP, CUP	P, A, AUP, CUP	P, A, AUP, CUP	P, A, AUP, CUP

c. Parklets are permitted, subject to an adopted El Segundo Parklet's Program. Refer to Chapter 6 for additional information.

d. Recreational Facilities may not exceed 5,000 s.f. of gross floor area.



Development standards provide site planning and building requirements such as building placement, maximum heights, setbacks, and the relationship to street and sidewalk

3. Development Standards

Development standards constitute the constraints for a project's building envelope in which new construction or a structural remodel is permitted. They provide site planning and building requirements such as building placement, maximum heights, setbacks, relationship to street and sidewalk and required parking to improve the overall aesthetic appearance and to serve as an incentive for private reinvestment in Downtown.

This document is a regulatory document adopted by ordinance. In any instance where the Specific Plan conflicts with the requirement of the ESMC, the Specific Plan provisions will take precedence. Where the Specific Plan is silent on a topic, the ESMC requirements remain in force. The following sections of the ESMC should be consulted, but is not a comprehensive list:

- 15-2-3 Exceptions to Building Heights
- 15-2-4 Height restrictions for walls and fences
- 15-2-9 Screening
- 15-2-10 Temporary Buildings
- Chapter 18: Signs

D. Main Street District

1. Introduction

The Main Street District is considered the Downtown core or “heart”. Its focus is to serve residents, local employees, and visitors within the most pedestrian oriented environment – narrow street width and wide sidewalks, high volume pedestrian-oriented uses at the ground floor, and building design that emulates a historic building pattern. The district runs north-south along Main Street (Main Street 300-500 blocks) between Grand Avenue and Mariposa Avenue and is bounded by the alleys to the east and west (see Figure 2.2, Main Street District Map). The district contains a wide variety of commercial uses and abuts Multi-Family Residential (R-2 and R-3) uses to the east and west across the adjacent alleyways.

The Main Street District will:

- Promote pedestrian-oriented enhanced streetscapes with buildings oriented toward the street with minimized pedestrian and vehicle conflicts, wide sidewalks to allow for outdoor dining, gathering areas, and additional pedestrian amenities.
- Site design standards minimize curb cuts along the street frontage and streetscape policies promote additional pedestrian-oriented enhancements such as street lighting and places to sit and rest while enjoying the shade from the lush tree canopy.
- Provide for a variety of uses including retail sales and restaurants at the street edge with office and residential units permitted above and behind the ground floor Main Street frontage.
- Incorporate standards that maintain and enhance the historic Downtown character with lower building heights along the Main Street frontage, additional building form and articulation criteria to emulate typical twenty-five foot lot widths, additional transparency requirements on the ground floor to enhance the pedestrian experience, and buildings located at the street edge with parking located behind the building and accessed from the alley.

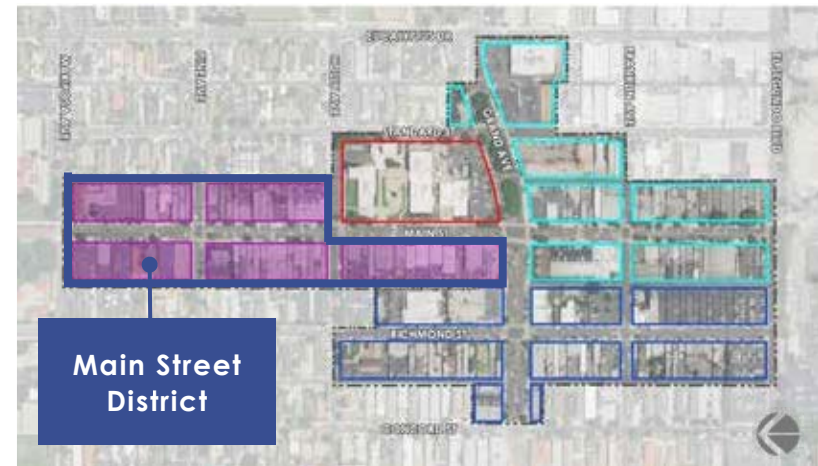


Figure 2.2 **Main Street District Map**

2. Site Development Standards

Intentional site planning and design ensures a pedestrian oriented traditional downtown environment. The following standards support the vision for the Main Street District.



BUILDING PLACEMENT INTERPRETATION 2-2A:

Buildings shall be located and oriented toward Main Street



BUILDING SETBACK INTERPRETATION 2-2B:

Ten foot maximum setback is permitted for front/ street adjacent yards if pedestrian-oriented plazas or outdoor dining is provided in the setback

Table 2-2: Main Street Site Development Standards

Building Placement and Orientation (refer to Interpretation 2-2A)	<ol style="list-style-type: none"> 1. The building frontage must be oriented toward Main Street. 2. Required on-site parking shall not be located between the building and the Main Street property line.
Lot Area	5,000 square feet minimum.
Lot Width	Twenty-five feet minimum for new lots.
Setbacks	
Front/Street Adjacent Yard (refer to Interpretation 2-2B)	<ol style="list-style-type: none"> 1. Zero setback at ground floor maximum. 2. Ten feet maximum permitted for pedestrian-oriented plazas or outdoor dining, subject to design review.
Side Yard	None required.
Rear Yard	None required.
Density and FAR	No limit.
Minimum Unit Size	250 square feet.

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Table 2-2: Main Street Site Development Standards (Continued)

Parking Location	<ol style="list-style-type: none"> 1. Alley access required. 2. Parking shall be provided in the rear of the site, or off-site via in-lieu fee or shared parking agreement per ESMC.
Parking Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines, Parking.
Residential Private Open Space Per Unit	Fifty square-feet.
Residential Common Open Space Per Unit	Twenty-five square-feet designed as an active or passive common space amenity. Rooftop decks may satisfy this requirement.
Residential Recreation Facility Per Unit	None required.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.



Common open space with active or passive pedestrian amenities shall be provided

3. Building Development Standards

Building form and massing support the desired character and use of an area. The pedestrian experience and aesthetic quality of a building is defined by these standards.

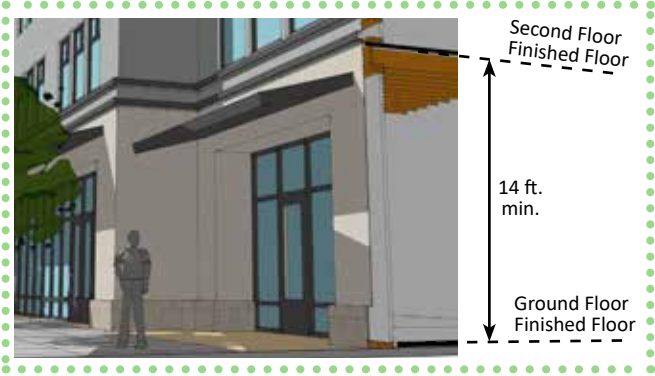


PLATE HEIGHT INTERPRETATION 2-3A:

Minimum plate height for ground floor commercial uses



Glazing shall be provided on the first-floor of buildings facing Main Street

Building Height	<ol style="list-style-type: none"> 1. Thirty feet maximum at front property line. 2. Forty-five feet maximum, ten feet from front property line. 3. Forty-five feet maximum at rear property line. 4. Height shall be calculated from existing grade at the adjacent property line. 5. See Section 15-2-3 of the ESMC for exceptions to building height.
Plate Height (refer to Interpretation 2-3A)	Fourteen feet minimum for ground floor commercial use.
First-Floor Glazing Facing Main Street	<ol style="list-style-type: none"> 1. Forty-five percent minimum transparency for first-floor front façade. 2. At least seventy-five percent of the façade between two and eight feet above the sidewalk shall be glazing. 3. Refer to Section H.2 Supplemental Area-Wide Standards and Guidelines for additional requirements.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.

E. Richmond Street District

1. Introduction

The Richmond Street District is generally located along Richmond Street (Richmond Street 100-300 blocks) and is situated one block west of and parallel to Main Street (see Figure 2.3, Richmond Street District Map). This district is similar in nature to the Main Street district, and it contains some of the oldest commercial buildings in the city, including the Old Town Music Hall. The district abuts Multi-Family Residential (R-3) uses to the west across the alley. It is an eclectic mixed-use environment of commercial and residential uses.

The Richmond Street District will:

- Celebrate the traditional “Old Town” character and entertainment uses within the area by encouraging restaurants with outdoor dining and art and culture related uses such as filming related uses, arts and entertainment, and design studios.
- Foster an eclectic mixed-use environment, allowing for more flexibility than the Main Street District with a broader mixture of commercial uses including breweries and tasting rooms, entertainment, professional, medical and dental offices.
- Provide professional office and stand-alone residential uses on the ground floor fronting Richmond Street.
- Include site design standards to minimize curb cuts along the street frontage and streetscape policies to promote additional pedestrian-oriented enhancements such as street lighting and places to sit and rest while enjoying the shade from the lush tree canopy.
- Incorporate standards that maintain and enhance the historic Downtown character with additional building form and articulation criteria to emulate typical twenty-five foot lot widths, additional transparency requirements on the ground floor to enhance the pedestrian experience, and buildings located at the street edge with parking located behind the building and accessed from the alley.

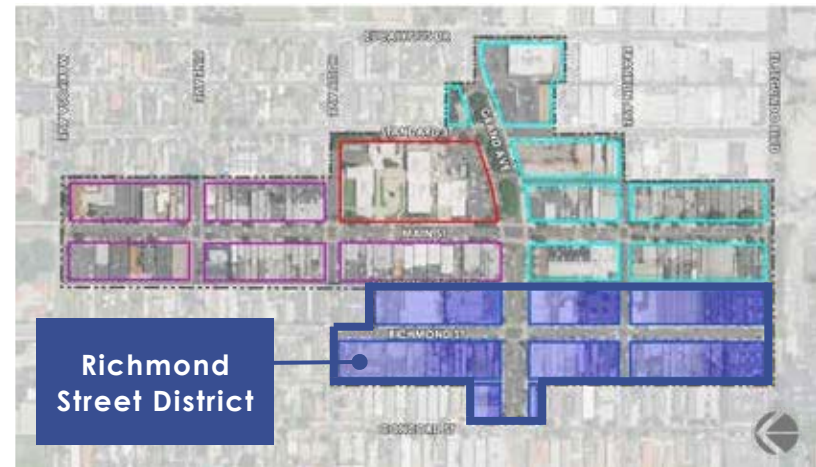


Figure 2.3 **Richmond Street District Map**

2. Site Development Standards

Intentional site planning and design ensures a pedestrian oriented traditional downtown environment. The following standards support the vision for the Richmond Street District.



BUILDING PLACEMENT INTERPRETATION 2-4A:

Buildings shall be oriented toward Richmond Street



BUILDING SETBACK INTERPRETATION 2-4B:

Ten foot maximum setback is permitted for front/street adjacent yards if pedestrian-oriented plazas, outdoor dining, or residential common open space is provided within the setback

Table 2-4: Richmond Street Site Development Standards

Building Placement and Orientation (refer to Interpretation 2-4A)	<ol style="list-style-type: none"> 1. Building shall be oriented toward Richmond Street. 2. Required on-site parking shall not be located between the building and the Richmond Street property line.
Lot Area	Five thousand square feet minimum.
Lot Width	Twenty-five feet minimum for new lots.
Setbacks	
Front/Street Adjacent Yard (refer to Interpretation 2-4B)	<ol style="list-style-type: none"> 1. Zero setback at ground floor maximum. 2. Ten feet maximum permitted for pedestrian-oriented plazas, outdoor dining, or residential common open space, subject to design review.
Side Yard	None required.
Rear Yard	None required.
Density and FAR	No limit.
Minimum Unit Size	Two hundred and fifty square feet.

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Table 2-4: Richmond Street Site Development Standards (Continued)	
Parking Location	<ol style="list-style-type: none"> 1. Alley access required. 2. Parking shall be provided in the rear of the site, or off-site via in-lieu fee or shared parking agreement per ESMC.
Parking Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines, Parking.
Open Space	<p>All required common open space must:</p> <ol style="list-style-type: none"> a. be physically or visually accessible to the residents, b. be a minimum of five feet in both length and width, and c. include a minimum of fifty percent of landscaping.
Residential Private Open Space Per Unit	Fifty square-feet.
Residential Common Open Space Per Unit	Twenty-five square-feet designed as an active or passive common space amenity. Rooftop decks may satisfy this requirement.
Residential Recreation Facility Per Unit	None required.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.



Residential units shall provide active or passive common open space

3. Building Development Standards

Building form and massing support the desired character and use of an area. The pedestrian experience and aesthetic quality of a building is defined by these standards.

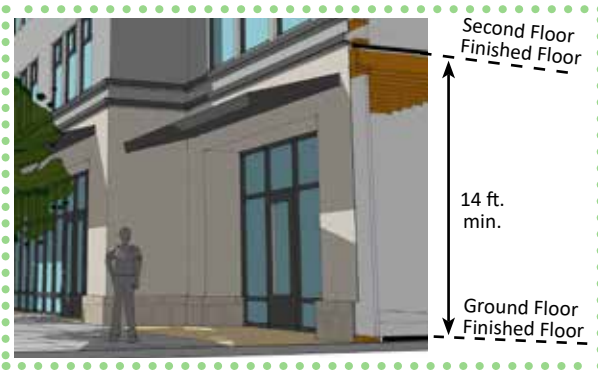


PLATE HEIGHT INTERPRETATION 2-5A:

Minimum plate height for ground floor commercial uses



FIRST-FLOOR GLAZING INTERPRETATION 2-5B:

Buildings facing Richmond Street shall have at least thirty percent transparency along first-floor front façade

Building Height	<ol style="list-style-type: none"> Forty-five feet maximum. Height shall be calculated from existing grade at the adjacent property line. See ESMC Section 15-2-3 for exceptions to building height.
Plate Height (refer to Interpretation 2-5A)	Fourteen feet minimum for ground floor commercial use.
First-Floor Glazing Facing Richmond Street (refer to Interpretation 2-5B)	<ol style="list-style-type: none"> Thirty percent minimum transparency for first-floor front façade. The bottom of first-floor window glazing shall not be higher than three feet above the adjacent sidewalk. Refer to Section H.2 Supplemental Area-Wide Standards and Guidelines for additional requirements.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.

F. Grand Avenue District

1. Introduction

The Grand Avenue District is generally located along the southern side of Grand Avenue from Marketplace Alley to Eucalyptus Drive and contains portions of Main Street and Standard Avenue (Main Street 100-200 blocks and portions of Standard Street 200-300 blocks). The Grand Avenue District serves as a gateway from the west entry of the City of El Segundo to the Downtown core. Several parcels are underutilized and larger than those located in other Districts thus providing the highest redevelopment opportunity within the Specific Plan area (see Figure 2.4, Grand Avenue District Map).

The Grand Avenue District will:

- Provide an opportunity to accommodate an increased demand for office and residential uses with the maximum building heights permitted.
- Support a vibrant Downtown with places for people to live, work, and play and provide community amenities such as publicly accessible open space and enhanced pedestrian access in and around an individual project site.
- Promote additional connectivity and Downtown character with enhanced and unified street scape amenities, pedestrian crossing areas, wayfinding and gateway signage and identity, buildings rather than parking located at the street edge, and ground floor design criteria to establish additional window and door transparency along Main Street and Grand Avenue.

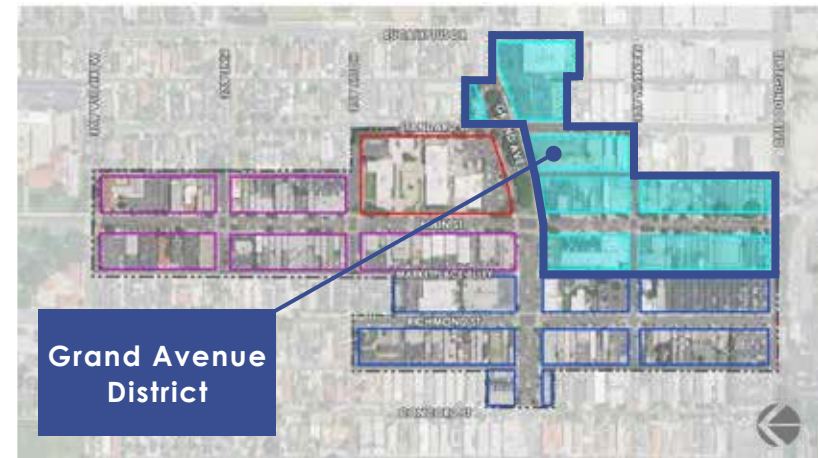


Figure 2.4 **Grand Avenue District Map**

2. Site Development Standards

Intentional site planning and design ensures a pedestrian oriented traditional downtown environment. The following standards support the vision for the Grand Avenue District.



Site planning and design ensures a pedestrian oriented Downtown environment

Table 2-6: Grand Avenue Site Development Standards

Building Placement and Orientation	1. Building shall be oriented toward Grand Avenue and/or Main Street.
Lot Area	Ten thousand square feet minimum.
Lot Width	1. One-hundred foot frontage minimum for new lots. 2. Individual lots less than one-hundred (100) feet of frontage, and under common ownership with a neighboring lot, shall submit a comprehensive development application including all parcels within the minimum lot width criteria.
Setbacks	
Front/Street Adjacent Yard	None required.
Side Yard	None required.
Rear Yard	None required.
Density and FAR	No limit.
Minimum Unit Size	Two hundred and fifty square feet.
Access	1. A maximum of one vehicle access point shall be provided from Grand Avenue. Additional access may be provided from alley or side streets. 2. Provide adequate access and facilities for various modes of transit, as required by the City’s Transportation Demand Management Program in ESMC Chapter 15-16. 3. Provide pedestrian access between buildings and transit facilities located on site and/or off site, if within adjoining public rights-of-way. If the building is part of a multi-building development project, then safe and convenient pedestrian access shall be provided between buildings.
Parking Location	1. Surface parking areas shall not be located adjacent to Grand Avenue or Main Street. Surface parking areas shall be located behind the building. 2. Parking structures shall incorporate first floor commercial or residential lobby when fronting Grand Avenue or Main Street. Access to parking structures is prohibited from Main Street.

Table 2-6: Grand Avenue Site Development Standards (Continued)

Parking Requirements	<ol style="list-style-type: none"> 1. A minimum of seventy-five percent of parking shall be required on-site. Any parking not provided on-site shall be satisfied via in-lieu fee or shared parking agreement per ESMC. 2. Refer to Section H. Supplemental Area-Wide Standards and Guidelines, Parking.
Open Space	<ol style="list-style-type: none"> 1. Shall not be achieved by the utilization of parking areas, driveways, service areas. 2. Interior side and rear setbacks may be considered as required open spaces and recreation facilities. 3. Up to fifty percent may be satisfied within a rooftop deck. 4. All required common open space shall: <ol style="list-style-type: none"> a. be physically or visually accessible to the residents, b. be a minimum of fifteen feet in both length and width, c. include a minimum of fifty percent of softscape landscaping, and d. include seating, as well as other pedestrian amenities, such as decorative lighting, planters, fountains or water features, distinctive paving, public art, landscaping, and bicycle racks.
Residential Private Open Space Per Unit	Fifty square-feet.
Residential Common Open Space Per Unit	One-hundred square-feet designed as an active or passive common space amenity.
Residential Recreation Facility Per Unit	Thirty square-feet.
Landscaping	<ol style="list-style-type: none"> 1. Ten percent minimum of the lot area. 2. Up to one-third of the required landscape area may be hardscape or plaza. Parking is not permitted within this area. 3. Ten percent of the required landscape area can be met through use of pervious paving, and may include parking in this area. This pervious paving is in addition to the hardscape or plaza area listed above. 4. Landscaping must be provided as required by ESMC Section 15-2-14 and Chapter 15-15A.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.

3. Building Development Standards

Building form and massing support the desired character and use of an area. The pedestrian experience and aesthetic quality of a building is defined by these standards.

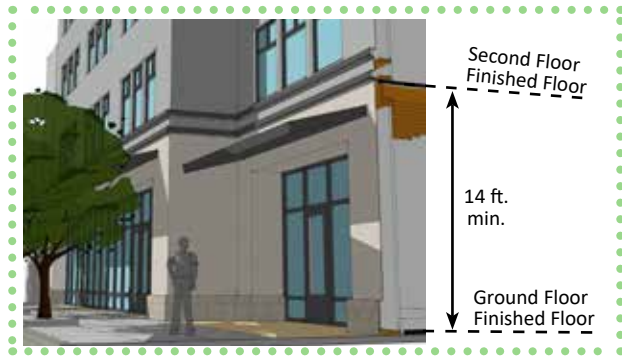


PLATE HEIGHT INTERPRETATION 2-7A:

Minimum plate height for ground floor commercial uses



STREET FACING GLAZING INTERPRETATION 2-7B:

Minimum percent transparency for first-floor front façades

Table 2-7: Grand Avenue Building Development Standards

<p>Building Height</p>	<ol style="list-style-type: none"> Sixty (60) feet maximum, with the exception of properties with frontage along Main Street. For properties fronting on Main Street height limit will be as follows: <ol style="list-style-type: none"> 30 feet maximum at front property line. 45 feet maximum, 10 feet from front property line. 45 feet maximum at rear property line. Height shall be calculated from existing grade at the adjacent property line. See ESMC Section 15-2-3 for exceptions to building height
<p>Plate Height (refer to Interpretation 2-7A)</p>	<p>Fourteen feet minimum for ground floor commercial use.</p>
<p>Street Facing First-Floor Glazing (refer to Interpretation 2-7B)</p>	<ol style="list-style-type: none"> Thirty percent minimum transparency for first-floor front façade. The bottom of first-floor window glazing shall not be higher than three feet above the adjacent sidewalk. Refer to Section H.2 Supplemental Area-Wide Standards and Guidelines for additional requirements.
<p>Additional Requirements</p>	<p>Refer to Section H. Supplemental Area-Wide Standards and Guidelines.</p>

G. Civic Center District

1. Introduction

Located centrally in the Specific Plan area, this district includes City Hall, the El Segundo Police Department, the El Segundo Fire Department, and existing public plaza and open spaces (see Figure 2.5, Civic Center District Map). The Farmer's Market is held every Thursday night on Main Street and vendors set up booths in the roadway. The existing plaza and open spaces at the Civic Center complex offer opportunities to activate and reinvigorate this area as a central public gathering hub and add vibrancy to the north end of Main Street. The underutilized surface parking areas along Grand Avenue provide an opportunity for a public parking structure that would allow for street parking to be reused for pedestrian seating and gathering spaces in key locations throughout the Downtown. Reduced travel lanes on Main Street will provide for increased pedestrian uses and streetscape improvements along the Main Street frontage. The Civic Center Plaza should serve as connecting hub between the south and north parts of Main Street.

The Civic Center District will:

- Expand and consolidate existing uses to include governmental offices and public safety facilities, recreational uses, outdoor entertainment and temporary events, outdoor retail uses, and a location for a future public parking structure.
- Allow for activities for all ages with enhanced and flexible multi-use outdoor gathering areas.
- Enhance opportunities for outdoor entertainment and temporary events and infuse outdoor retail uses such as newsstands, coffee carts, flower stands, vendors, and food trucks.

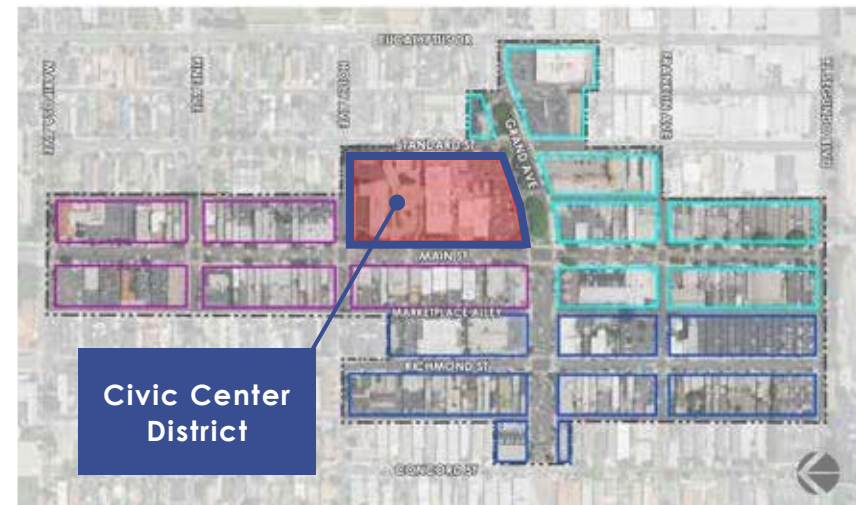


Figure 2.5 Civic Center District Map

2. Site Development Standards

Intentional site planning and design ensures a pedestrian oriented traditional Downtown environment. The following standards support the vision for the Civic Center District.



Site planning and design ensures a pedestrian oriented and active Downtown environment

Table 2-8: Civic Center Site Development Standards

Building Placement and Orientation	Building shall be oriented toward Grand Avenue and/or Main Street.
Lot Area	None required.
Lot Width	None required.
Setbacks	
Front/Street Adjacent Yard	None required.
Side Yard	None required.
Rear Yard	None required.
Density and FAR	No limit.
Access	<ol style="list-style-type: none"> 1. A maximum of one vehicle access point shall be provided from Grand Avenue and from Holly Avenue. 2. Vehicular access from Main Street is not permitted. 3. Access is permitted along Standard and not limited.
Parking Location	<ol style="list-style-type: none"> 1. Surface parking areas shall not be located adjacent to Grand Avenue or Main Street. Surface parking areas shall be located behind the building.
Parking Requirements	<ol style="list-style-type: none"> 1. All parking required shall be located on-site or in a designated City parking facility. 2. Refer to Section H. Supplemental Area-Wide Standards and Guidelines, Parking.

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Table 2-8: Civic Center Site Development Standards (Continued)

Open Space	Refer to Civic Center District Public Plaza Development Standards in Section G.4.
Landscaping	<ol style="list-style-type: none"> 1. Twenty-five percent minimum of the lot area. 2. Up to seventy-five percent of the required landscape area may be hardscape or plaza. Parking is not permitted within this area. 3. Ten percent of the required landscape area can be met through use of pervious paving, and may include parking in this area. This pervious paving is in addition to the hardscape or plaza area listed above. 4. Landscaping must be provided as required by Section 15-2-14 and Chapter 15-15A of this title.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.



Up to seventy-five percent of the required landscape area may be hardscape or plaza

3. Public Parking Recommendations

The Civic Center District includes two surface parking lots for City Staff and the public, and there is a portion of the parking lot on Standard Street by Grand Avenue which is gated and restricted to City vehicle parking.

A new public parking structure is recommended to replace a portion of the existing surface parking along Grand Avenue. The new parking structure should be open to the public and continue to provide City staff parking with restricted access to City vehicles. The first floor uses of the parking structure fronting Grand Avenue and Main Street should incorporate civic uses and public services, or provide public open space or courtyards. Additionally, a public plaza is suggested at the corner of Main Street and Grand Avenue to provide a new community gathering space and enhance this primary intersection. Refer to Section G.4, Public Plaza Development Standards, and Parking Strategies in Chapter 3 for additional information.



Figure 2.6 Civic Center Parking Lot Improvements

4. Building Development Standards

Building form and massing support the desired character and use of an area. The pedestrian experience and aesthetic quality of a building is defined by these standards.



Building development standards enhance the desired character and use of the Civic Center District

Table 2-9: Civic Center Building Development Standards

Building Height	<ol style="list-style-type: none"> 1. Sixty feet maximum. 2. Height shall be calculated from existing grade at the adjacent property line. 3. See ESMC Section 15-2-3 for exceptions to building height.
Plate Height	No minimum required.
Street Facing First-Floor Glazing	<ol style="list-style-type: none"> 1. All glazing facing Main Street and Grand Avenue shall be transparent glass which provides a minimum visibility of light transparency/transmittance level of fifty percent. 2. Refer to Section H.2 Supplemental Area-Wide Standards and Guidelines for additional requirements.
Additional Requirements	Refer to Section H. Supplemental Area-Wide Standards and Guidelines.

5. Public Plaza Development Standards

Three areas within the Civic Center District have the potential to be vibrant community plaza spaces that serve a variety of users with many interests. A redesign of these underutilized and dated spaces will provide opportunities for pedestrian gathering within a range of spaces designed to support activities such as outdoor seating, concerts and events, socializing, lounging, playing, and celebrating with friends and neighbors (see Figure 2.7, Civic Center Public Plaza Map). The Civic Center Plaza should serve as a connecting hub between the north and south parts of Main Street.

The redesign of the Civic Center public plazas shall:

1. Provide gathering spaces for outdoor entertainment and events and allow for activities for all ages with enhanced and flexible multi-use outdoor gathering areas.
2. Include *Erigonium parvifolium*, Sea Cliff Buckwheat to provide habitat areas for the El Segundo Blue Butterfly along with interpretive signage to educate the public about California native plants and the Blue Butterfly (refer to Chapter 4, Section E.2, Landscaping, for additional information).
3. Create a beautiful green space with shade trees, native and drought-tolerant plants.
4. Include shaded seating areas with gazebos, benches, and tables to entice visitors to take a walk or picnic and strategically locate focal points such as public art and accent planting.
5. Allow for passive and relaxing activities (such as chess and reading) and include more active uses (such as exercise equipment and/ or a children’s play area).
6. Include a “Downtown El Segundo” sign and a historical or cultural kiosk with information about the City and key Downtown destinations.

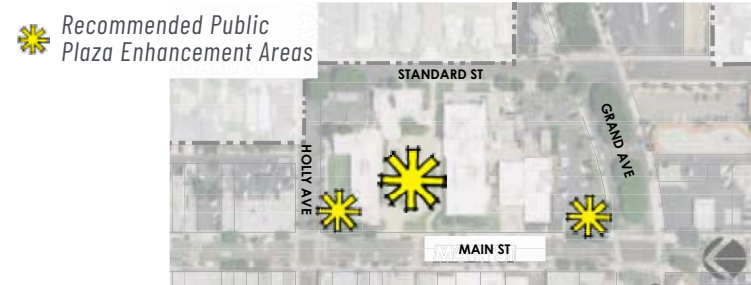


Figure 2.7 Civic Center Public Plaza Map



Provide gathering spaces for outdoor entertainment and events



Include interpretive signage to educate the public about native plants and the El Segundo Blue Butterfly



Provide an outdoor stage or amphitheater for music events or outdoor movies



Integrate an inclusive children's play area or feature



Provide seating in a variety of sizes and configurations

7. Provide an outdoor stage or amphitheater for music events and outdoor movies.
8. Consider focal points such as public art, fire pits, and/ or outdoor fireplaces.
9. Integrate an inclusive children's play area or feature, i.e. boulders or fountain.
10. Provide lighting for nighttime activities, security, and aesthetic interest. Up lighting of trees and/or string lights or other accent lighting elements are encouraged.
11. Be visually open and oriented towards the street. Provide pedestrian connections to any street and be designed to seamlessly integrate into the sidewalk on Main Street.
12. Incorporate trellises, pergola and other vertical element to draw users into the space.
13. Provide additional pedestrian amenities such as benches and bike racks facing the street to maximize social interaction.
14. Incorporate shade elements such as tree canopy, shade sails, or trellises.
15. Provide seating in varying sizes and configurations to allow for individual quiet reflection and larger group discussions. Elements may include informal seating options such as mounds of grass, steps, low seat walls, or raised planters to increase overall seating capacity.

H. Supplemental Area-Wide Standards and Guidelines

1. Introduction

This section contains standards that apply to all private property within the entire Specific Plan area. The future urban form of Downtown El Segundo will be established by providing opportunities for development that adheres to the following customized context-sensitive development standards in this chapter, along with the placemaking design guidelines and public realm enhancements in Chapters 3 and 4. Projects shall comply with the development standards contained within this chapter, and the intent of the guidelines.



Opportunities for development will be established to shape the future urban form of Downtown El Segundo

- **Standards.** Standards are specifications that the community considers essential to the creation and preservation of a high quality, sustainable and coherent city. Conformance with Standards is mandatory. Such provisions are indicated using the words “shall,” “must,” “is required,” and “is/is not permitted”. Applicants must review and incorporate all applicable standards. Reviewers shall ensure consistency between the project and the regulations/standards as applicable.
- **Guidelines.** Guidelines provide additional information to assist the designers with fulfilling the intent of the Specific Plan. Guidelines pertain to issues of visual character and aesthetics. Conformance with Guidelines is recommended, especially to ensure the swiftest possible approval. Although conformance with Guidelines is recommended, developers are permitted to propose alternative design solutions if they can show that such design solutions meet the overall objectives of the Specific Plan. Guidelines are indicated using the words “should,” “may,” or “is/are encouraged.”

2. Building Form and Articulation

Building form and massing support the desired character and use of an area. The pedestrian experience and aesthetic quality of a building is defined by these standards.

Building Wall Modulation - Front

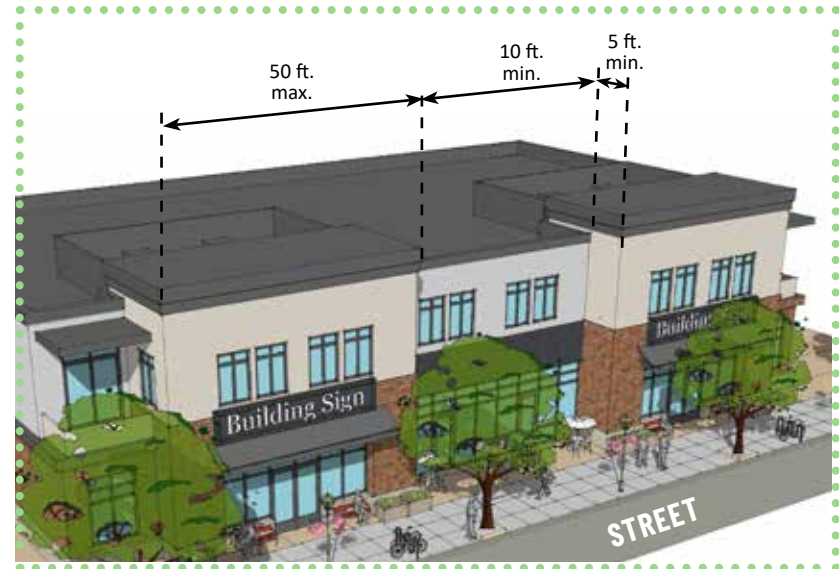
1. Fifty feet maximum length without at least a five foot variation in wall plane offset for a minimum of ten feet in length (refer to Interpretation 2-A).
2. Building materials and articulation shall be applied to replicate traditional twenty-five foot building width, irrespective of the building's total width. New construction of infill buildings that are wider than this shall be broken down into a series of structural bays or components.

Building Wall Modulation - Side and Rear

1. Variation in massing, roof form, and wall planes, as well as articulation, shall be integrated into every wall surface. Blank wall shall be avoided.
2. Outdoor storage and equipment shall be enclosed and designed with the same materials as the primary building materials.

Roofline Variation

1. Fifty feet maximum length without a variation in roof eave, ridge, or parapet height.
2. Flat roofs shall include a parapet with a detail element such as cornice, cap, or similar detail. It shall convey a sense of permanence and the interior side, or any screened equipment shall not be visible from public view.



BUILDING WALL MODULATION INTERPRETATION 2-A:

Front building walls shall not exceed fifty feet in length without at least a five foot variation in wall plane offset for a minimum of ten feet in length

Primary Entrance

1. Buildings shall have a primary entrance door adjacent to the public sidewalk.
2. Building entrances and storefronts shall incorporate with one or more of the following design elements:
 - a. A change in wall plane – recessed or projecting.
 - b. Wall articulation/additional detail around the entry.
 - c. Projecting element above the entry.

Street Facing Glazing

1. All glazing shall be transparent glass which provides a minimum visibility of light transparency/transmittance level of fifty percent.
2. At least seventy-five percent of the glass area must be unobstructed by signage, including advertisement, screens, and window coverings.
3. Reflective glass is prohibited.
4. Metal garage doors, folding or exterior mounted security screens or other security features which detract from the street appearance are prohibited.
5. Awnings shall be individually mounted above the window or door.

3. Historic Resources

The Specific Plan area contains four individual properties that appear to be eligible as historical resources (see Figure 2.8, Potential Historic Resources):

- 105 W. Grand Avenue (built 1928)
- 140 W. Richmond Street (built 1921)
- 203 Richmond Street (built 1925)
- 218-220 Richmond Street (built 1915)

Additionally, there are twenty-seven properties on the 100 and 200 blocks of Richmond Street that appear to be collectively eligible as a potential historic district as shown on Figure 2.8, Potential Historic Resources. Refer to Historical Resource Technical Report, prepared by Teresa Grimes, dated May 2023 for additional information.

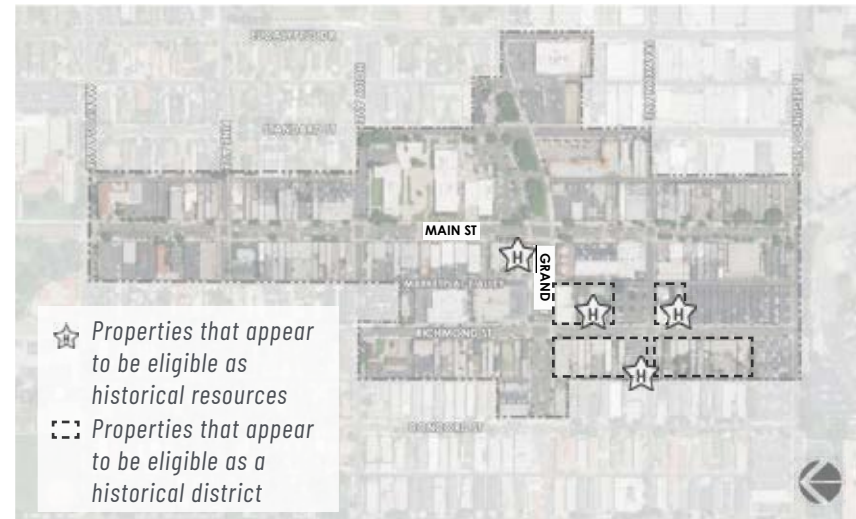


Figure 2.8 Potential Historic Resources



The Old Town Music Hall (140 W. Richmond Street) was built in 1921 and is a rare remaining example of a theater that was originally a live performance venue called the State Theater



105 W. Grand Avenue is prominently situated at the corner of Grand Avenue and Main Street and is an example of an existing mixed-use commercial building



203 Richmond Street was the former location of the first El Segundo City Hall and Library



218-220 Richmond Street is one of the few remaining examples of a mixed-use commercial building from the 1910s

The City values the historic resources and character of the Downtown area, and has policies and discretionary review requirements to ensure their preservation including:

1. ESMC Chapter 15-14 (Historic Preservation) establishes procedures for the designation of Historic Resources and for the review of alterations to designated historic resources citywide.
2. Chapter 7 of this Specific Plan (Administration) requires review and approval of a Discretionary Downtown Design Review (DDR) for all substantial alterations, additions, and new construction projects. For projects on or adjacent to properties identified individually as potential historic resources or contributing to a potential historic district, DDR review shall consider the existing neighborhood character, building scale, building material, and potential impacts to historic resources.
3. Chapter 7 of this Specific Plan (Administration) requires review and approval of a discretionary permit for demolition of structures on properties identified individually as potential historic resources or contributing to a potential historic district. The required discretionary review shall ensure that no substantial adverse change occurs in the significance of a historical resource.

The above policies and discretionary review requirements ensure that no significant impacts occur to potential historic resources in the Downtown Specific Plan area.

4. Mixed-Use

Mixed-use projects combine commercial, office, and/or residential uses into one single development. The uses can be combined in multiple ways, such as each use located on a separate floor or wing of a building or each use in separate buildings on the site. Both types of mixed-use development are encouraged.

Mixed-use projects can create unique design issues, such as the need to balance the requirements of residential uses with the needs of commercial uses. When designing mixed-use developments, it is important that commercial and office uses are sensitive to the residential uses of the project.

1. All buildings shall be sited to reduce odor, noise, light and glare, and visual and other conflicts between commercial and residential uses.
2. Noise-generating equipment, such as refrigeration units and air conditioning and exhaust fans shall be located away from residential uses.
3. Residential development shall have dedicated entries or lobby spaces and open space dedicated to privatized common tenant use.
4. Commercial uses with residential units either above or attached shall provide ventilation systems to prevent odors from adversely affecting residential units.



Mixed-Use buildings with commercial on the ground floor and residential units above

5. Parking

The purpose of this section is to provide for adequate parking standards, to assure that parking spaces shall be suitably maintained and available for the use of the occupants of the site and to mitigate potential associated on-street parking and traffic circulation problems throughout the Downtown and surrounding areas.

General Provisions

1. Minimum Requirements - No use or building shall be established, erected, enlarged or expanded unless parking facilities are provided and maintained as required by this Chapter and Table 2-10. Unless off-street parking reductions are permitted pursuant to provisions herein, the number of off-street parking spaces required by Table 2-10 shall be considered the minimum necessary for each standalone use. When the calculation of the required number of off-street parking spaces results in a fraction of a space, the number of spaces shall be rounded up to the nearest whole number.
2. Renovation, Expansion, Use Changes
 - a. *Renovation (without expansion or use change)* - No additional parking is required.
 - b. *Expansion (without use change)* - Additional parking per Table 2-10 is required for the net new floor area.
 - c. *Existing Buildings (with permitted uses)* - Existing uses in an existing building with a maximum ten thousand square feet may change to any other use identified within the Table 2-10 without providing additional on-site parking spaces, provided that all existing on-site parking spaces provided in connection with the building or structure shall be continued and available for use with the subject building.
3. Refer to ESMC Sections 15-15-1 through 15-15-5 for parking standards not included within this chapter.
4. Unless stated otherwise, parking shall be based on net floor area defined in ESMC Section 15-1-6.
5. In the case of mixed uses in a building or on a site, the total requirements for parking facilities shall be the sum of the requirements for the various uses computed.
6. The number of parking spaces required by this chapter may be reduced by the payment of a parking in-lieu fee, per ESMC Section 15-15-6D for the Main Street, Grand Avenue, and Richmond Street Districts.
7. Tandem spaces shall have a maximum length of forty feet, provide for parking for two vehicles maximum, and may only be utilized in residential development or where a Parking Demand Study is provided. All tandem parking spaces, where allowed, shall be clearly outlined on the surface of the parking facility.
8. Parking facilities in all Districts shall be designed in such a manner that any vehicle on the property will be able to maneuver as necessary so that it may exit from the property traveling in a forward direction. However, cars may exit onto an alley traveling in a reverse direction. A vehicle shall not have to enter a street to move from one location to any other location within the same facility.
9. Any lights provided to illuminate any parking area shall be arranged so as to direct the light away from any residential dwelling unit.

Table 2-10: Parking Ratio Table

LAND USES	PARKING REQUIREMENT
Alcohol Sales, Off-Site	Refer to Commercial, Retail Sales
Alcohol Sales, On-Site without Food Service (Bars)	1.5 spaces/1,000 sf
Alcohol Sales, On-Site with Food Service	Refer to Restaurant, Full Service
Artistic or Cultural Seivces	0 spaces/1,000 sf
Assembly Halls	4 spaces/1,000 sf
Bed and Breakfast Inn	1 space/unit
Brewery and Alcohol Production (including on-site consumption or restaurant)	1.5 spaces/1,000 sf for seating/serving area
Commercial, Financial Institutions	2 space/1,000 sf
Commercial, Retail Sales	1.5 spaces/1,000 sf (under 10,000 gross sf) 2.5 spaces/1,000 sf (over 10,000 gross sf)
Commercial, Retail Services	1.5 spaces/1,000 sf
Daycare Centers	1 space/1,000 sf
Dwelling, Multiple-Family	Studio/1 Bedroom: 1 space/unit 2 Bedrooms or more: 1.5 spaces/unit
Dwelling, Senior Citizen Housing	0.25 space/unit
Entertainment (Live)	1 space/8 seats
Fitness Center	2 spaces/1,000 sf
Hotel	1 space/room
Live/ Work	1 space/1,000 sf plus Multiple-Family standards
Movie Theater and Entertainment Facilities	1 space/8 seats

(Continued on next page)

Table 2-10: Parking Ratio Table (Continued)

LAND USES	PARKING REQUIREMENT
Museum	0 space/1,000 sf
Offices, General	2 spaces/1,000 sf (under 10,000 gross sf) 3 spaces/1,000 sf (over 10,000 gross sf)
Office, Medical-Dental	2 spaces/1,000 sf
Outdoor Dining	0 spaces for the portion up to 500 sf 1 space/300 sf for the portion over 500 sf
Parklets	0 spaces for the portion up to 500 sf 1 space/300 sf for the portion over 500 sf
Public Facilities	0 spaces/1,000 sf
Recreational Facilities (Indoor Only)	2 spaces/1,000 sf
Restaurant, Food To Go	1.5 spaces/1,000 sf
Restaurant, Full Service	1.5 spaces/1,000 sf
Studio/Sound Stages and Support Facilities	1 space/1,000 sf
Temporary Outdoor Retail Sales Events	0 spaces/1,000 sf
Theater	1 space/8 seats

Sites with Transportation Systems Management (TSM) and Transportation Demand Management (TDM) Plans

The number of required parking spaces may be further modified subject to approval of a Transportation Systems Management or Transportation Demand Management Plan, pursuant to the procedures and requirements of Chapters 15-16 and 15-17 of the El Segundo Municipal Code.

Failure to Maintain Required Parking

In the event parking facilities required to be provided under this section or required pursuant to any application approved in accordance with this section are not maintained, the Director of Community Development may revoke and cancel the certificate of occupancy issued for such structure. Prior to such revocation, the Planning Commission shall hold a public hearing in accordance with the public hearing procedures provided in ESMC Chapter 15-28, Public Hearings. However, if it appears that failure to maintain such required parking was reasonably beyond the control of the person required to maintain the same, the certificate of occupancy shall not be revoked until the owner has had at least 90 days to reestablish the minimum required parking. In the event the certificate of occupancy is revoked, the premises covered thereby shall not be occupied or used for any purpose until a new certificate of occupancy has been issued.

Parking Reductions

1. *Parking Demand Study.* The Director of Community Development may modify the required number of parking spaces for fewer than ten spaces based on the submittal of a parking demand study. Reductions of ten or more spaces require Planning Commission approval. Additionally, for any use for which the number of parking spaces is not listed, the Director of Community Development or Planning Commission will specify the required number of spaces based on a parking demand study. A parking demand study must include, without limitation, information specifying the number of employees, customers, visitors, clients, residents and owner-occupancy of residence and business (for existing legal non-conforming residential uses), shifts, deliveries, parking spaces, or other criteria established by the Director of Community Development. The study may also include the use of valet or attendant parking.
2. *Joint Use and Off-Site Parking Facilities.* Unless otherwise prohibited by this Specific Plan or the ESMC, parking spaces may be joint use or located off-site on a different lot or lots, subject to approval of a parking demand study and a parking agreement. The agreement shall be recorded in the office of the County Recorder, prior to the issuance of a Building Permit. The agreement may include conditions as the Director of Community Development, or the Planning Commission, deems appropriate.

Parking Structure Design

Parking structures are usually larger buildings and as such can have a significant impact upon the streetscape. All proposed parking structures in the Downtown should adhere to specific standards to ensure a pedestrian-oriented environment on Downtown streets.



Parking structures should be articulated in similar character as surrounding uses and visually appealing on all frontages

1. Parking structures should be visually appealing on all frontages. Parking structure facades should be articulated in similar character as surrounding uses.
2. Where parking structures are planned, the street wall should be composed of active uses that screen podium parking, parking structures, and other uses that do not contribute to a vibrant pedestrian environment.
3. Structures located adjacent to Main Street, Richmond Street, or Grand Avenue shall minimize the visual impact by providing pedestrian activated uses and urban design and landscaping features.
4. Light fixtures within parking structures shall be designed to minimize off-site light spillover onto adjacent properties.
5. To give the structure proportions reflective of a regular building, the openings should resemble window openings rather than long, horizontal parking garage openings. The deck and railing pattern should not dominate the elevations.
6. Substantial massing should occur at the corner of the structures to anchor the building and give the structure proportions similar to a human occupied building. These panels should incorporate relief to create shadow patterns and add visual interest.
7. Height should be added to the parapet at key areas on the building structure to accent entries and reduce the long horizontal façade that is typical of parking structures.
8. Consider adding awnings or trellis structures at vehicular and pedestrian entrances to create a pedestrian scale.
9. Consider providing landscaping and vines on façades to help reduce the visual impact of the structure.
10. Structures should to the extent feasible incorporate design elements that facilitate conversion to other uses, including, but not limited to, higher floor to ceiling heights on ground levels, fast ramps, and flat parking plates/levels.

6. Service and Delivery

Service areas must be carefully designed in order to create an aesthetic street frontage in Downtown El Segundo.

1. Loading areas are required for buildings with gross building areas equal to or greater than fifty thousand square feet.
2. Loading/unloading, service areas, and trash and recycling enclosures shall not front onto Grand Avenue, Main Street, or Richmond Street (refer to Interpretation 6-A).
3. For lots adjoining an alley, loading areas shall adjoin or have access from the alley. Loading spaces may encroach into any required alley setback.
4. Loading docks and service bays shall be a minimum of twenty feet from any public street.
5. On-site loading areas shall be at least eighteen feet long and ten feet wide.
6. Loading or unloading of trucks is prohibited between ten PM and seven AM unless it can be demonstrated that such activities would not exceed the noise limits of the ESMC.
7. Refuse collection service shall be contracted with an approved local service provider. Refuse collection areas shall be screened per ESMC Section 15-2-8 D.
8. On lots adjoining an alley, refuse collection storage areas shall be oriented to and accessed from the alley.



LOADING AREA INTERPRETATION 6-A

Loading/unloading, service areas, and trash and recycling enclosures shall not front onto Grand Avenue, Main Street, or Richmond Street

7. Signage

Signs are significant features of shopping and entertainment districts as they serve as invitations for people to enter and patronize stores and restaurants. Unique, attractive signs signify quality establishments and products.



Unique and attractive signs enhance the charm and character of the Downtown

General Signage Provisions

1. All signs must comply with ESMC Chapter 15-18 and the following standards. In the event of a conflict, the standards in this Specific Plan shall take precedence.
2. Signage facing any public street within the Specific Plan area shall be limited to a combination of storefront, window and perpendicular/pedestrian signs.
 - a. Each property is allowed an area up to a maximum of one square foot per lineal foot of street frontage.
 - b. If adjacent lots are aggregated into one, then a formula of one and one-half square feet per lineal foot of street frontage is used to determine maximum allowable signage.
3. Multi-tenant developments of three or more commercial tenants require an approved Master Sign Program by the Director of Community Development or designee per ESMC Section 15-18-5.
4. Signs should be in scale with and in proportion to the primary building façade so that the signs do not dominate the appearance.
5. Sign colors, materials, and design should be compatible with that of the primary building façade.
6. Painted wood and metal are appropriate materials for signs.
7. Signs that reflect the type of business through design, shape, or graphic form are encouraged.
8. The method of attaching the sign to the building should be integrated into the overall sign design.
9. Signs on canopies and awnings are encouraged.
10. Signs should not cover up important architectural features.
11. Flush mounted signs should be positioned within architectural features such as the window panel above the storefront or flanking the doorway.

Storefront Signs

1. *Size.* Individual storefront signs may be no more than twenty square feet.
2. *Number.* One storefront sign is permitted per storefront.
3. *Lettering.* Freestanding lettered/iconic signage (without background area) is encouraged and allowed.
4. *Lighting.* Signage shall be lighted from an external source, such as gooseneck lamps.
5. *Temporary Signs.* Temporary signs are limited to no more than fifteen percent of the window or storefront area for a maximum of thirty days per year.
6. *Prohibited:*
 - a. Internally illuminated canister signs.
 - b. Pole or pylon signs.
 - c. Roof signs.

Window Signs

1. *Size.* Window signage may be no more than sixteen square feet.
2. *Lettering.* Lettering, such as painted script is encouraged, while signs with backgrounds are discouraged.
3. *Prohibited.* Advertisements placed in windows are not allowed.

Perpendicular/Pedestrian Signs

1. *Size.* Perpendicular/Pedestrian signs may be no more than nine square feet on each sign face (double sided signs are allowed).
2. *Number.* One Perpendicular/Pedestrian sign is permitted per storefront.
3. *Projection:*
 - a. Signs shall not project from the wall of the building or structure to which they are attached more than thirty inches and shall not exceed eight feet in height.
 - b. Projecting signs less than twelve feet above the grade are not allowed. Permitted projecting signs may project over public sidewalks.



Storefront sign with freestanding lettering accentuated with gooseneck lamps



Window signs with painted script



Perpendicular/ pedestrian signs may project over the public sidewalk

Non-Street Fronting Signs

1. *Size.* Signage abutting an alley or private property shall not exceed 0.6 square feet per lineal foot of alley frontage or interior property line length. All other standards shall apply.
2. *Additional Elements:*
 - a. In addition to allowed signage, a maximum of two square feet of lettered/logo and/or icon painted directly onto the entrance (without a background) is allowed.
 - b. In addition, a directory wall sign identifying non-street fronting businesses within a building is allowed on non-street fronting building elevations (including elevations fronting on alleys). The directory sign may not exceed twelve square feet.

A-Frame Signs

1. *Size:*
 - a. Width 24"-34"
 - b. Length 36"-48" (including frame, sign face, and any vertical supports)
2. *Number.* There shall be only one A-Frame sign per business.
3. *Graphics.* The sign face area shall not consist of text for more than two-thirds of the area. The balance of the sign face area should contain images, art, or graphics.
4. *Location on Sidewalk.* A-frame signs shall only be permitted on the public sidewalk in front of the business. The sign must be positioned to allow a minimum of five feet clear sidewalk area and not impede the main path of pedestrian travel. The sign must be placed within eighteen inches of the curb or adjacent to the corresponding outdoor dining area or business frontage. All applicable ADA standards must be met.

5. *Materials.* Exterior quality wood or metal (except as supplemented by material for changeable messages, see below). Handbills and/or similar paper attachments shall not be affixed to approved A-Frame signs
6. *Changeable Sign Area.* Changeable sign area must be screwed or bolted to the sign. The sign must not contain any glare producing surfaces or inappropriate lighting (blinking, fluorescent, neon lights, exposed power cords, etc). No more than one-half of each sign face may be reserved for changeable messages, chalk board messages, or 'wipe down' board messages.
7. *Finish.* Fully painted and/or sealed; color must be in keeping with the colors for the business establishment. In general, fluorescent or other strikingly bright or vivid colors will not be approved unless part of a discernible theme other than simply to gain attention.
8. *Construction and Support.* The name of the establishment must be clearly printed on each sign face in a color and style consistent with the establishment's primary signage.

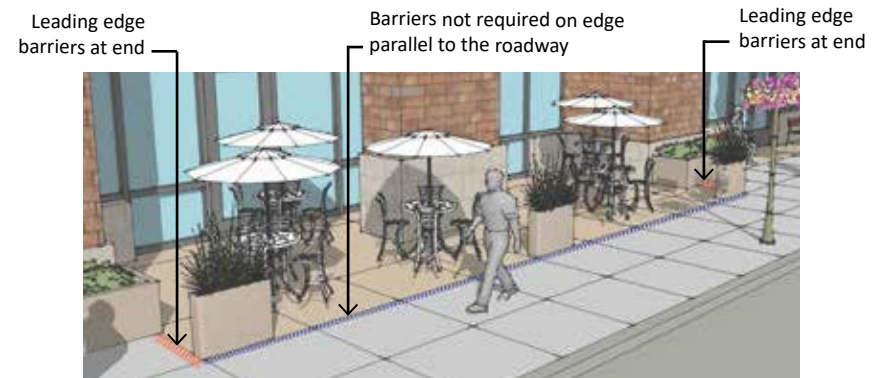


A-frame sign example

8. Outdoor Dining

Sidewalks, excess parking spaces, and other exterior paved areas may be used for the placement of tables, chairs, benches, planters, umbrellas, and related items to enliven the overall pedestrian experience and support day and nighttime activity. Wide, pedestrian-friendly sidewalks should activate the Downtown by providing spaces for outdoor dining and informal gathering. All new and substantially remodeled outdoor dining areas, as determined by the Director, are subject to design review and the standards in this section. Any existing outdoor dining area that doesn't conform with these standards will be considered legal nonconforming.

1. *Dining Area.* Outdoor Dining Area (Area) shall be directly associated with an existing or proposed eating establishment.
 - a. Dining area may be covered or uncovered.
2. *Barriers:*
 - a. *Visibility.* Fences or other perimeter barriers/enclosures with a height between thirty-six inches and fifty inches must be at least fifty percent open (see-through) in order to maintain visibility of street level activity. Any enclosure with a height over fifty inches must be at least eighty percent open (see-through).
 - b. *Appearance.* Dining area barriers (fences, gates, ropes, planters, etc.) must be both visually appealing and functional. All barrier material must be maintained in a good visual appearance, without visible fading, dents, tears, rust, corrosion, or chipped or peeling paint.
 - c. *Freestanding.* All barriers must be freestanding, without any (or minimal) permanent or temporary attachments to buildings, sidewalks, and other infrastructure. Sectional fencing (generally defined as rigid fence segments that can be placed together to create a unified fencing appearance) is an acceptable solution for outdoor seating areas using barriers. Such fencing is portable, but cannot be easily shifted by patrons or pedestrians, as can less rigid forms of enclosures. Sectional fencing must be of metal (aluminum, steel, iron, or similar) or of wood construction and must be of a dark color (either painted or stained). Vinyl and/or plastic material is prohibited.
 - d. *Height.* Stanchions, end posts, and other corner supports must measure thirty-six inches to fifty inches in maximum height. Planning Commission approval is required for any component greater than fifty inches in height from the sidewalk surface.
 - e. *Maximum Distance from the Ground.* All barriers must be detectable to visually impaired pedestrians who employ a cane for guidance; therefore, the bottom of barriers must be no greater than twenty-seven inches above the sidewalk surface.
 - f. *Leading Edge Barrier.* All outdoor dining areas that extend more than three feet into the public right-of-way must have a detectable barrier at the leading edges to ensure that visually impaired pedestrians using canes can detect the dining area safely.



Example of leading edge detectable barriers at an outdoor dining area extending more than three feet into the right-of-way

- g. *Rope or Chains.* Barrier rope or chains must have a diameter of at least one inch to maintain detectability by the visually impaired. Plastic chains are discouraged.
- h. *Planters.* Planters are a friendlier and more attractive way to delineate an outdoor dining area and may be used in addition to, or in place of, other barrier designs. Planters must not exceed a height of fifty inches above the level of the sidewalk. All planters must have live plants within them. Artificial plants, empty planters, or planters with only bare dirt, mulch, straw, wood chips, or similar material are not permitted. Planters must be cleaned of all trash at least daily.
- i. *Signage.* Barriers must not contain signage for the restaurant or any other entity.



Outdoor chairs shall be all-weather, and each dining area should contain chairs that are similar to each other

- j. *Prohibited.* Fabric inserts (natural or synthetic) are not permitted to be used as part of a barrier. Chain link, cyclone fencing, chicken wire, or similar materials are not permitted to be used as part of a barrier.
3. *Furniture and Fixtures:*
- a. *Freestanding.* Furniture and fixtures must not be secured to trees, lamp posts, street signs, hydrants, or any other street infrastructure by means of ropes, chains, or any other such devices.
 - b. *All-Weather.* Furniture and fixtures used in outdoor dining must be specifically made for outdoor use.
 - c. *Storage.* All moveable furniture and fixtures must be removed and stored inside after business hours.
 - d. *Signage.* Furniture and fixtures must not contain signage for the restaurant or for any other entity in the form of wording, logos, drawings, pictorial or photographic representations, or any other likewise identifying characteristic.
 - e. *Chairs.* Chairs, like other outdoor dining elements, must contribute to the overall atmosphere of Downtown, and (if applicable) to any historic building or historic overlay district, and must be complementary in both appearance and quality.
 - *Consistency.* All chairs used within an establishment's outdoor seating area should match each other by being of visually similar design, construction, and color.
 - *Colors.* Chairs may be colored or of a natural unpainted material (e.g., all-weather metal, wood, wicker, etc.). Chairs are not permitted to be white plastic. In general, fluorescent or other strikingly bright or vivid colors will not be approved unless part of a discernible theme other than simply to gain attention.

- *Upholstery.* Upholstered chairs are permitted as are upholstered cushions for chairs. In general, fluorescent or other strikingly bright or vivid colors will not be approved unless part of a discernible theme other than simply to gain attention. Outdoor and water-resistant materials are required. Cushions must be attached in some manner to the chair itself.
- f. *Tables.* Tables need to be functional, not only for patrons, but also for pedestrians, given the limited space available for outdoor dining on many sidewalks. Outdoor dining furniture must also contribute to the overall atmosphere of Downtown and, if applicable, to any historic property or district, and be complementary in both appearance and quality.
 - *Colors.* Tables may be painted, anodized, colored or of a natural unpainted material (e.g., all-weather wood, metal, wicker, etc.). Tables are not permitted to be white plastic. In general, fluorescent or other strikingly bright or vivid colors will not be approved unless part of a discernible theme other than simply to gain attention.
 - *Size and Shape.* The size and shape of tables strongly affects the functionality of an outdoor dining area. Due to many of the narrow sidewalks, restaurants should strive for space efficient seating layouts and furniture configuration. Square or rectangular tables are strongly recommended as such tables may fit flush against a building's wall and can permit more usable surface area for patrons while at the same time leaving more space available for pedestrians.
 - *Durability.* All tables and chairs shall be of sturdy construction and made of quality materials.
- g. *Heaters and Fans.* Heaters and Fans are permitted provided that they do not impede pedestrian circulation within the outdoor dining area. Heaters and fans incorporated into approved awnings projecting from the building are preferred.
- h. *Prohibited.* Any furniture and fixtures other than tables, chairs, lighting, and umbrellas are prohibited. This includes, but is not limited to: serving stations, bar counters, shelves, racks, sofas, televisions, trash receptacles, and torches. Furniture that is lightweight and thus subject to being blown around during wind and sudden storm events is prohibited; as such, most plastic furniture is unacceptable.



Outdoor tables shall contribute to the overall atmosphere of the Downtown



Umbrella colors shall blend with the surrounding built environment

4. *Shade Structures and Umbrellas.* Umbrellas can add a welcoming feel to outdoor dining areas, and provide shelter from the elements; making their use desirable for outdoor dining applications. Appropriately designed and sized umbrellas are permitted. Pop-up tents and freestanding canopies are not permitted. All umbrellas must comply with the following conditions:

a. *Contained within the Outdoor Seating Area.* To ensure effective pedestrian flow, all parts of any umbrella (including the fabric and supporting ribs) must be contained entirely within the outdoor seating area.

- b. *Height.* The lowest dimension of an extended umbrella must be at least seven feet above the sidewalk surface. In order to avoid causing an undue visual obstruction of other businesses, umbrellas must not exceed a height of ten feet above the level of the sidewalk. These measurements must include not only the umbrella frame and panels, but also any decorative borders such as fringes, tassels, or other such ornamentation.
- c. *Colors.* Umbrellas must blend appropriately with the surrounding built environment. Umbrellas must be of one solid color. In general, fluorescent or other strikingly bright or vivid colors will not be approved unless part of a discernible theme other than simply to gain attention. Signage and wording are not permitted.
- d. *Size and Shape.* The size and shape of an umbrella strongly affects its functionality within a constrained space such as an outdoor dining area. Due to the narrow measurements of most restaurants' outdoor dining areas, restaurants using umbrellas should strive for space-efficient umbrella designs.
- e. *Market-Style Umbrellas.* Market style umbrellas (those designed specifically for patio or outdoor dining use, and which vent breezes) are preferred.
- f. *Material.* Umbrella fabric must be of a material suitable for outdoor use, and must be canvas-type. No plastic fabrics, plastic/vinyl-laminated fabrics, or any type of rigid materials are permitted for use as umbrellas within an outdoor dining area.
- g. *Removable.* Umbrellas must be able to be removed each night or during strong storms and stored inside, for the safety of pedestrians and surrounding business.
- h. *Awnings.* Awnings are allowed subject to the same color and material requirements as umbrellas.

5. *Lighting:*

- a. *All-Weather.* Lighting used within an outdoor dining area must be specifically made for outdoor use, and must have a hardwired electrical connection.
- b. *Matching.* All lighting used within an outdoor dining area should match each other by being of visually similar design, construction, and color.
- c. *Height.* The lowest dimension of lighting must be at least seven feet above the sidewalk surface. In order to avoid causing an undue visual obstruction of other businesses, lighting must not exceed a height of ten feet.
- d. *Color Temperature and Brightness of Lighting.* Lighting should be of a color temperature between 2,500 Kelvin and 3,000 Kelvin; 2,700 Kelvin is ideal. All lighting must be dimmable, and must not exceed the brightness of public street lighting as determined by the Director.
- e. *Maintenance.* Lighting must be kept in proper working order at all times. Burnt out lighting must be replaced promptly (within one working day).
- f. *Lighting Source.* The light must not contain any glare producing surfaces or inappropriate lighting (blinking, fluorescent, neon lights, etc).
- g. *Support.* Lighting must not be secure to trees, lamp posts, street signs, hydrants, or any other street infrastructure by means of ropes, chains, or any other such devices.
- h. *Signage or Wording.* Lighting must not contain signage for the restaurant or for any other entity in the form of wording, logos, drawings, pictorial or photographic representations, or any other likewise identifying characteristic.
- i. *Power Cords.* Lighting must be hardwired in an electrical conduit. Power cords and similar methods of power are not allowed.

6. *Accessibility.* The outdoor dining area must meet the minimum applicable requirements under the Americans with Disabilities Act (ADA) and the California Building Code (CBC).
7. *Fire Safety.* Area shall be designed and operated so that it is in compliance with regulations regarding access to building openings, fire lanes, use of combustible materials and other fire safety measures as identified in the ESMC and other applicable law.



Outdoor lighting is recommended to enhance the pedestrian atmosphere and create a sense of vibrancy in the Downtown



Wide, pedestrian-friendly sidewalks activate the Downtown by providing usable spaces for outdoor dining and informal pedestrian gathering areas

8. *Pedestrian Access:*

- a. *Clear Passage Area.* Six foot minimum clear passage area is required for pedestrian access between outdoor dining area and the curb where the sidewalk is at least eight feet. A wider clear passage area may be required for any of the previous conditions at the discretion of the Director of Community Development or his/her designee.
 - No sidewalk less than eight feet in width may be allowed to have outdoor dining.

- 9. *Business Setback.* Restaurants need to be mindful of adjoining businesses when using outdoor dining areas, making sure that neighboring businesses remain visible to pedestrians and motorists. If tall elements are used as part of the design, an applicant may be required to adjust the outdoor dining area’s layout and/or distance from the adjoining property line (twenty-four inches or more) to ensure that this visibility is maintained.

- 10. *Dining Area Floor.* The floor of outdoor seating areas must be uncovered sidewalk as to provide continuity with the adjacent public right-of-way (does not apply to approved parklet configurations).

Parklets

Parklets are outdoor dining and gathering areas which are located adjacent to the public sidewalk and typically placed within an existing parking space adjacent to the roadway curb. Parklets are encouraged within the Downtown Specific Plan Area, but subject to a future Parklet’s Program. Refer to Chapter 6 for additional information regarding the Parklet Program implementation.



CHAPTER 3: PUBLIC REALM - MULTIMODAL MOBILITY

A. Introduction

This section of the Specific Plan Update discusses the opportunities for improvement of mobility that reflect the needs and goals of the Downtown El Segundo community. The Multimodal Mobility chapter includes improvement opportunities related to the pedestrian network, bicycle circulation, public transit, vehicular circulation, and parking. This section supports the Specific Plan Update objectives related to the improvement of walkability and the pedestrian environment, encouragement of bicycle use, support of enhanced and efficient mobility opportunities for walking, driving, bicycling, and transit, and the development of a comprehensive parking plan. They are also designed to reinforce the Planning Principles established within Chapter 1 of this document.

Planning Principles Related to Multimodal Mobility:

- Expanded Mobility** - Support enhanced and efficient mobility opportunities for walking, driving, bicycling, and transit.
- Pedestrians and Bicycles** - Improve walkability and the pedestrian environment and encourage bicycle use with additional bicycle improvements and amenities.
- Improved Public Parking** - Develop a comprehensive parking plan with increased parking wayfinding signage and facilitate innovative methods for parking such as shared parking agreements.

The opportunities presented within this Multimodal Mobility section can enhance the comfortability of walking, biking, and taking transit, to create a Downtown El Segundo in which community and atmosphere is emphasized in addition to vehicular mobility. This section also includes improvement opportunities for the Downtown corridors of Main Street, Grand Avenue, and Richmond Street that could enhance multimodal mobility. It is not the intent of this chapter to provide specific street geometric design standards rather, it is to suggest design-oriented treatments of the street environment. Refer to streetscape amenities and beautification recommendations in Chapter 4 for additional information and requirements.



Walking is an important mode of access within a vibrant Downtown



Figure 3.1 Pedestrian Circulation Map

B. Pedestrian Network

Opportunities for the improvement of the pedestrian network in this section focus on improving access and comfortability on both sidewalks and at roadway crossings. During the public engagement period for the Specific Plan Update, respondents showed strong support for walkability improvements within Downtown, with almost two-thirds of survey respondents listing enhanced walkability among their top three priorities. Additionally, walking is an important mode of access for Downtown El Segundo, as almost ninety percent of survey respondents listed walking as one of their typical mode of travel choice for getting to Downtown.

The Smoky Hollow Specific Plan has identified improvements along Franklin Avenue which include artistic crosswalks and potential future “woonerf” which are envisioned to transform the street into a pedestrian and bike-friendly connection between Smoky Hollow and the Downtown. See additional standards and requirements for Franklin Avenue within the Smoky Hollow Specific Plan.

1. Sidewalks and Pedestrian Streetscape

The pedestrian experience plays a very important part in the functionality and the economic health of the Downtown environment and sidewalks are a key component of the Downtown pedestrian circulation network. Sidewalks provide pedestrian access to virtually every activity and provide critical connections between other modes of travel, including the automobile, public transit, and bicycles. Wide sidewalks, street trees and landscaping, and consistent street furnishings all contribute to a desirable pedestrian street scene. Sidewalks must be wide enough to be comfortable, with smooth paving and special accent paving in select locations, and buffering provided from vehicular traffic. Crosswalk design, traffic control devices, and visual markers all are important in encouraging pedestrian use.

Currently, pedestrian facilities are provided throughout Downtown, including sidewalks on all streets. While sidewalks exist throughout Downtown, some existing mobility challenges were observed. In some locations, the sidewalk is obstructed or damaged by trees, which can affect the pedestrian experience. While sidewalk amenities, such as benches, promote visitor comfortability, they also result in narrowed walkways in some areas.

Vehicular ingress and egress throughout Downtown present comfortability challenges to pedestrians as well. Many driveways have limited visibility to the sidewalk in advance of the exit, which could make it difficult for drivers exiting the structure to see pedestrians. Additionally, in most locations where the sidewalk is interrupted by a driveway, the curb cuts do not feature ADA-compliant curb ramps, resulting in degraded comfortability and access for those using mobility devices.

The following general improvements should be implemented to provide a more comfortable pedestrian experience in Downtown El Segundo (see Figure 3.1, Pedestrian Circulation Map):

1. Sidewalk surface should be stable, firm, smooth, and slip resistant.
2. Sidewalks shall have a “through pedestrian zone” that is kept clear of any fixtures and/or obstructions. A minimum of four feet shall be reserved to allow for two people to walk comfortably side by side and in accordance with the Americans with Disabilities Act (ADA) requirements.
3. Potted plants, raised planters, streetscape elements and/or landscaped parkways should be used to define the sidewalk edge and provide a buffer between pedestrians and moving vehicles where feasible.
4. Integrate streetscape amenities and beautification recommendations established in Chapter 4 of this document.
5. Add mirrors to parking structure, driveway, and alleyway exits to increase the visibility of approaching pedestrians.
6. Remove sidewalk obstructions or re-route around obstructions, such as trees, to increase accessibility, especially for those using wheeled devices.
7. Upgrade curb cuts at driveways and alleyways to ADA-compliant curb ramps to improve accessibility for those using mobility devices.



Midblock crosswalk on Main Street between Holly Avenue and Pine Avenue

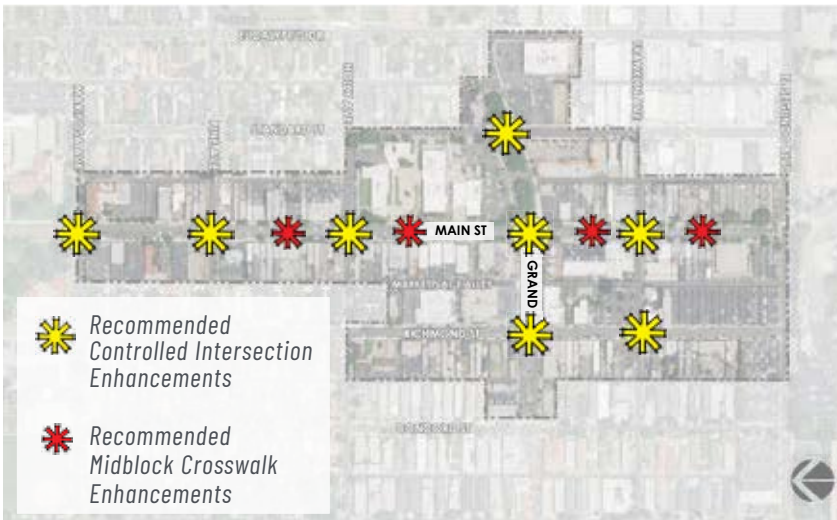


Figure 3.2 Pedestrian Crossing Map

2. Pedestrian Crossings

Pedestrian crossings are currently provided throughout Downtown, at both intersections and at some midblock locations. There are four midblock crosswalks, all located on Main Street, which feature pedestrian-activated in-road flashing lights, crosswalk signs, and yield paddles. These midblock crossings lack crosswalk lines, which reduces their visibility to drivers.

While some intersection pedestrian crossings in Downtown El Segundo feature ADA-compliant curb ramps with truncated domes, most lack these accessibility enhancements. Additionally, most crosswalks lack edge lines and striping. Both signalized intersections in Downtown do not provide pedestrian countdown on the signal heads.

Midblock Crosswalks

The following walkability enhancements should be considered at the four existing midblock crosswalks along Main Street (see Figure 3.2, Pedestrian Crossing Map):

1. Install pedestrian signals to better alert drivers to crossing pedestrians and encourage signal compliance.
2. Install raised crosswalks for better visibility and awareness of crossing pedestrians.
3. Crosswalks should provide decorative paving or continental-style striping to increase their visibility. At a minimum, the crosswalk edge-lines shall be striped to meet California Manual on Uniform Traffic Control Device (MUTCD) standards.
4. To better serve users with mobility challenges, upgrade ramps to meet ADA compliance by adding truncated domes, modifying pedestrian push button locations relative to the ramp, and providing audible push buttons.

Controlled Intersection Crosswalks

The following walkability enhancements should be considered at controlled intersections (see Figure 3.2, Pedestrian Crossing Map):

1. Upgrade curb ramps to meet ADA compliance by adding truncated domes and modifying pedestrian push buttons.
2. Crosswalks should provide decorative paving or continental-style striping to increase their visibility. At a minimum, the crosswalk edge-lines shall be striped to meet California Manual on Uniform Traffic Control Device (MUTCD) standards.
3. At signalized intersections, install pedestrian countdown heads to meet current standards and inform pedestrians of the remaining walk time available.
4. Ensure that pedestrian signals comply with current MUTCD pedestrian clearance time standards, with a standard walking speed of 3.5 feet per second.

3. Pedestrian Paseos

Paseos are pedestrian-only pathways that provide opportunities to create unique public spaces. Paseos provide internal connections between the roadways and alleyways and allow for pedestrian-friendly activities to occur. Paseos provide linkages between public parking areas and the alleyway and street environment and connections between residential and commercial areas.

The Specific Plan area has existing paseos at Handprint Alley, located between Main Street and Marketplace Alley, and Butterfly Lane Alley, located between Main Street and the alleyway west of Standard Street. These paseos should be enhanced with paseo improvements listed below where feasible, and accentuated with wayfinding signage, accent lighting, and decorative paving at the entry on Main Street to provide increased visibility.

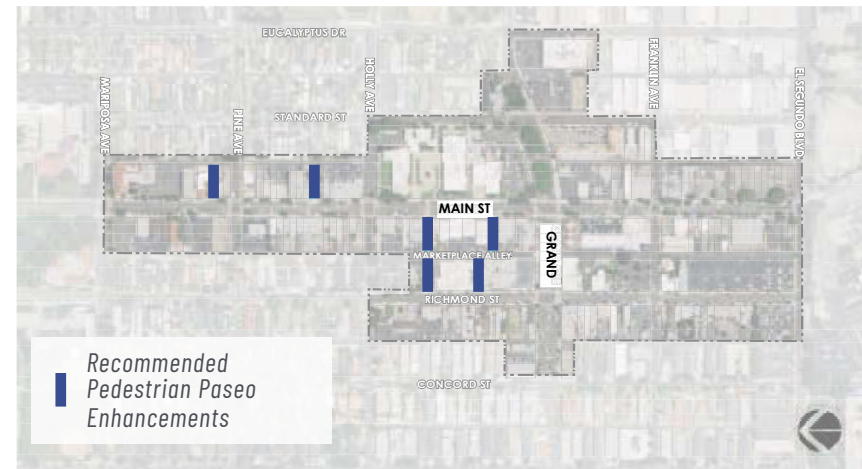


Figure 3.3 **Pedestrian Paseo Map**



Handprint Alley is an existing Downtown pedestrian paseo which integrates public art to make a narrow space more appealing

Additional paseos are recommended throughout the Specific Plan area to further enhance pedestrian access, promote walkability, and increase opportunities for community gathering. Paseos are suggested at existing parking lots, such as between Main Street and Richmond Street, to provide opportunities for pedestrian linkages to the roadways, alleyways, and existing public parking. Paseo improvements should also be utilized at the existing public walkways located between primary roadways and alleyways, such as the walkway west of the existing public parking structure at Grand Avenue and Richmond Street, to activate the use of these pedestrian linkages.



Paseos provide off-street linkages and allow for unique pedestrian spaces

The following enhancements should be considered at paseos (see Figure 3.3, Pedestrian Paseo Map):

1. The pedestrian entry to paseos should be highly visible from the public right-of-way. Consider the consistent use of vertical elements within the streetscape as wayfinding devices at paseo entries such as arched entry elements, trellises, banners and hanging plants on light poles, and/or large potted plants.
2. An intensive wayfinding program should be used in paseos to direct and orient pedestrians to key areas in the Downtown.
3. Paseos should include pedestrian amenities such as seating, landscaping, special paving treatment, and public art and be well lit utilizing pedestrian scale decorative lighting to create safe and usable spaces that are visually appealing at all hours.
4. Paseos shall be ADA accessible and accommodate emergency access as required.

C. Bicycle Circulation

Opportunities for the improvement of the bicycle network in this section focus on comfortability, connection to existing Citywide bicycle facilities, and convenience. During the public engagement period for the Specific Plan Update, almost half of survey respondents listed biking as one of their typical modes of travel for visiting Downtown El Segundo, suggesting the importance of enhanced bicycle mobility in Downtown's transportation future.

Bicycle Lanes

Currently, bicycle facilities in Downtown El Segundo consist of Class III bicycle routes with on-pavement shared lane markings, also known as "sharrows", on Main Street and Grand Avenue. West of Downtown, Class II bike lanes currently exist along Grand Avenue, between Loma Vista Street and Vista Del Mar, providing bicycle access to El Segundo Beach. The Specific Plan Update envisions the enhancement of east-west bicycle facilities through Downtown to connect to these Class II bike lanes, providing improved bicycle mobility between Downtown and other points of interest in the City, such as El Segundo Beach (see Figure 3.4, Bicycle Circulation Map, and Section E, Vehicular Circulation, for additional information).

The Class III bicycle route along Main Street connects El Segundo Boulevard in the south to Imperial Avenue in the north, providing direct access to City Hall, within Downtown El Segundo, and Library Park and El Segundo High School, north of the Specific Plan area. The Specific Plan Update envisions improved bicycle comfortability along this corridor, without compromising direct access to these points of interest.



A Class III bicycle route with "sharrow" lane marking

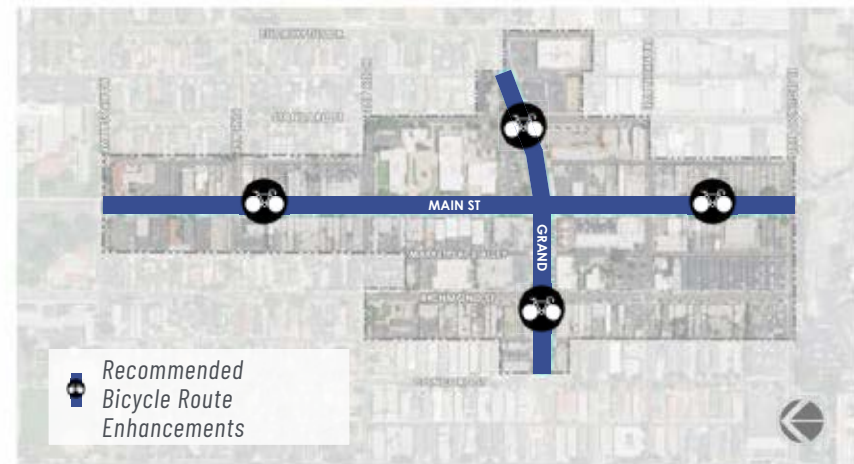


Figure 3.4 Bicycle Circulation Map



Existing bicycle wayfinding sign on Grand Avenue

Bicycle Accommodation and Wayfinding

The bicycle facilities in Downtown El Segundo are supported by route signage, wayfinding signage for area destinations, and decorative bicycle racks with a Downtown El Segundo themed-design.

While existing bicycle racks provide short-term parking and add an element of placemaking, a bicycle hub, consisting of a gated area with controlled access, could be installed in the parking structure for more secure and longer-term parking. The bicycle hub could also feature a repair station, with basic tools such as wrenches and pumps, to support the convenience of bicycle travel to and from Downtown.

Enhanced bicycle wayfinding signage, such as maps which show area bicycle routes and destinations, could be installed at Downtown gateway points and at the intersection of the two existing bike routes, at Main Street and Grand Avenue. This upgraded wayfinding can support bicycle navigation and comfortability throughout the Downtown. Refer to Chapter 4, Section B, Gateway and Wayfinding Signage for additional information.

D. Public Transit

Opportunities for the improvement of public transit in this section focus on efficiency of transit service and comfortability of transit stop amenities. During the public engagement for the Specific Plan Update, less than one percent of survey respondents listed public transit as one of their typical modes for visiting Downtown El Segundo. Envisioning a more efficient and comfortable transit environment in Downtown could help to increase ridership and improve access for those who rely on or choose to utilize public transit.

Transit Stakeholders Discussion

In May 2022, a virtual transit stakeholders meeting was held, in which representatives from transportation service providers in and around Downtown El Segundo shared their goals and discussed opportunities to be incorporated into the Specific Plan Update. Topics discussed included service-related items, such as coordination between the City and Beach Cities Transit about Main Street closure detours, as well as transit stop attributes such as shelters and bus zone lengths.

Transit Service

Downtown El Segundo is served by Beach Cities Transit and City of El Segundo Transportation. During temporary closures of Main Street between Holly Avenue and Grand Avenue, the bus lines operating on the corridor are re-routed. Below is a list of the bus routes that provide service to and around Downtown:

- *Beach Cities Transit Line 109* – Line 109 connects LAX and Torrance via El Segundo, Manhattan Beach, Hermosa Beach, and Redondo Beach. In Downtown El Segundo, this line runs along Main Street and Grand Avenue. This line has headways of 40-50 minutes during weekdays.
- *Lunchtime Shuttle* – Lunchtime Shuttle services were suspended during the COVID-19 pandemic and had not resumed as of Winter 2023. Previously, the City of El Segundo Transportation Lunchtime Shuttle operated on a continuous loop between Downtown El Segundo and the Smoky Hollow area to the east from 11:45 to 2pm on weekdays.
- *Beach Shuttle* – Following suspended service during the COVID-19 pandemic, the City partnered with Swoop, Inc. to resume Beach Shuttle service for the 2022 summer season. The Beach Shuttle operates between El Segundo and El Porto Beach during the El Segundo Unified School District summer break. There are several stops located near Downtown.
- *Dial-a-Ride* – The City currently operates Dial-a-Ride (DAR) service in partnership with Lyft. DAR primarily focuses on enhancing accessibility for seniors and disabled residents. The service operates on weekdays and serves the entirety of Downtown.

The following improvements to transit service should be considered to enhance mobility to, from, and within Downtown El Segundo (see Figure 3.5, Transit Stop Map, and Chapter 4, Section C.c, Bus Shelters and Transit Stops, for additional information):

1. Coordinate with Beach Cities Transit on their ongoing short-range transportation plan development to ensure that Line 109 continues to serve Downtown El Segundo and identify opportunities to increase service frequency or hours of service.
2. Continue operating the Beach Shuttle each summer through public-private partnerships.
3. Continue operating DAR through public-private partnerships with expanded service hours, including evenings and weekends.

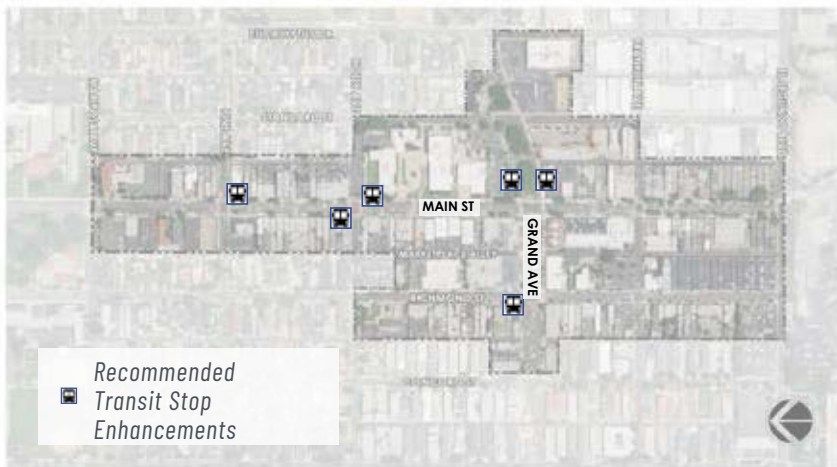


Figure 3.5 **Transit Stop Map**

4. Investigate public-private partnership opportunities and/or otherwise resume operation of the Lunch Time Shuttle or similar service. Upon resumption, expand service hours to include early mornings and evenings to provide a First-and-Last-Mile commuting solution and enhance the dinnertime connections between Downtown El Segundo, Smoky Hollow, and the east part of the City.
5. Continue communication between City Hall, Beach Cities Transit, and the El Segundo Police Department to enhance public outreach regarding temporary closures of Main Street and subsequent transit service detours.
6. Conduct a public/mass transit study to increase ridership on BCT buses and the City's other transit services as well as ensure adequate service to the north portion of Main Street, near Pine and Mariposa Avenues

Transit Infrastructure

Currently, the facilities featured at bus stops within Downtown vary by stop. Some include a bench and waste bin, while others provide no accommodations. There are two existing bus stops featuring shelters, one on Main Street within the temporary closure area, and one on Grand Avenue between Standard Street and Eucalyptus Drive. The following bus stop enhancements should be considered to improve transit mobility and rider comfortability in Downtown El Segundo:

1. Provide transit shelters at Downtown bus stops, where space allows. Transit shelters could be designed to reflect City or Downtown community aesthetic desires.
2. At a minimum, include a bench and waste bin at each bus stop.
3. Increase bus zone length by extending red curb at stops, to at least thirty-five feet where feasible.

E. Vehicular Circulation

Opportunities for the improvement of vehicular circulation in this section focus on multi-modal operations at intersections and placemaking considerations along roadway segments. During the public engagement period for the Specific Plan Update, just over two-thirds of survey respondents listed driving as one of their typical modes for visiting Downtown El Segundo, suggesting vehicular access to be an important value for the Downtown community.

During the development of the Specific Plan Update, a level of service (LOS) study was conducted to evaluate the state of vehicular circulation within Downtown. Current LOS was studied at the following three intersections, all of which were determined to operate acceptably:

- Main Street and Mariposa Avenue
- Main Street and Grand Avenue
- Main Street and El Segundo Boulevard

While it is important to recognize how people get to Downtown, it is equally important to understand why they come and what they expect once they get there. The livability and attraction of a successful Downtown is connected to the design of its streets. Large and walkable sidewalks, reduced travel lanes that are easy to cross, slower traffic, and amenities such as places to sit, pedestrian lighting, signage, and special paving all influence the user's experience.

The following section discusses the current, preferred, and alternate roadway configurations for Main Street, Grand Avenue, and Richmond Street. Main Street and Grand Avenue are the primary corridors for vehicular circulation within Downtown, and Richmond Street is notable for its change in vehicular access during the COVID-19 pandemic. This section proposes re-configuration opportunities on Main Street, Grand Avenue, and Richmond Street, which improve pedestrian mobility throughout Downtown and serve Specific Plan objectives.

Note: The Smoky Hollow Specific Plan has identified potential one-way traffic improvements along portions of Standard Street and Eucalyptus Drive to increase on-street parking. See additional standards and requirements for Franklin Avenue within the Smoky Hollow Specific Plan.

1. Main Street

Main Street is the primary north-south corridor in Downtown El Segundo. Main Street is a four-lane collector north of Grand Avenue and a four-lane secondary arterial south of Grand Avenue, as designated in the El Segundo General Plan Circulation Element. Within Downtown, Main Street provides parallel on-street parking and the speed limit on Main Street is twenty-five miles per hour (mph). Some stop-controlled intersections on Main Street are enhanced with light-emitting diode (LED) flashing stop signs, such as the intersection with Franklin Avenue. The typical existing roadway cross-section of Main Street in the Downtown is eighty feet, with four ten foot travel lanes (two in each direction) with bike “sharrows”, twelve foot wide sidewalks, and two eight foot parking lanes (see Figure 3.6, Main Street Existing Road Section).

The segment of Main Street from Grand Avenue to El Segundo Boulevard is designated as a Truck Route in the General Plan Circulation Element and is marked by signage. This segment is also a designated Class III bicycle route, marked with “sharrows”. The Preferred Roadway Concept for Main Street proposes a reduction in the number of travel lanes on Main Street from two lanes in each direction to one lane in each direction, which, depending on the purpose and use of this Truck Route, could increase the potential for truck-bicycle interactions.

A future truck route study is recommended to further investigate the purpose and use of the existing truck route. Refer to the Implementation Action Plan in Chapter 6 for additional information.



Figure 3.6 Main Street Existing Road Section

Preferred Concept

The proposed Pedestrian Mobility Emphasis concept for Main Street envisions enhanced pedestrian comfort and outdoor gathering opportunities, with wider sidewalks and outdoor dining, and new Class II bike lanes (see Figure 3.7, Main Street Preferred Road Section). The designated bike lanes provide greater horizontal separation between cyclists and vehicular traffic than the existing Class III "sharrow" bike routes and the reduced and narrowed travel lanes allow for widened sidewalks with expanded pedestrian uses and outdoor dining opportunities. The Pedestrian Mobility Emphasis concept maintains the existing parallel parking spaces on both sides of the street and is expected to maintain a similar parking supply along Main Street as exists today.

Main Street is anticipated to host occasional or periodic street closures for community events including the weekly Farmers Market which may be partial closures of any street blocks between El Segundo Boulevard and Mariposa Avenue. Additionally, a future traffic study is recommended to analyze the potential long-term closure of Main Street to vehicles. Refer to Chapter 6 for additional information.

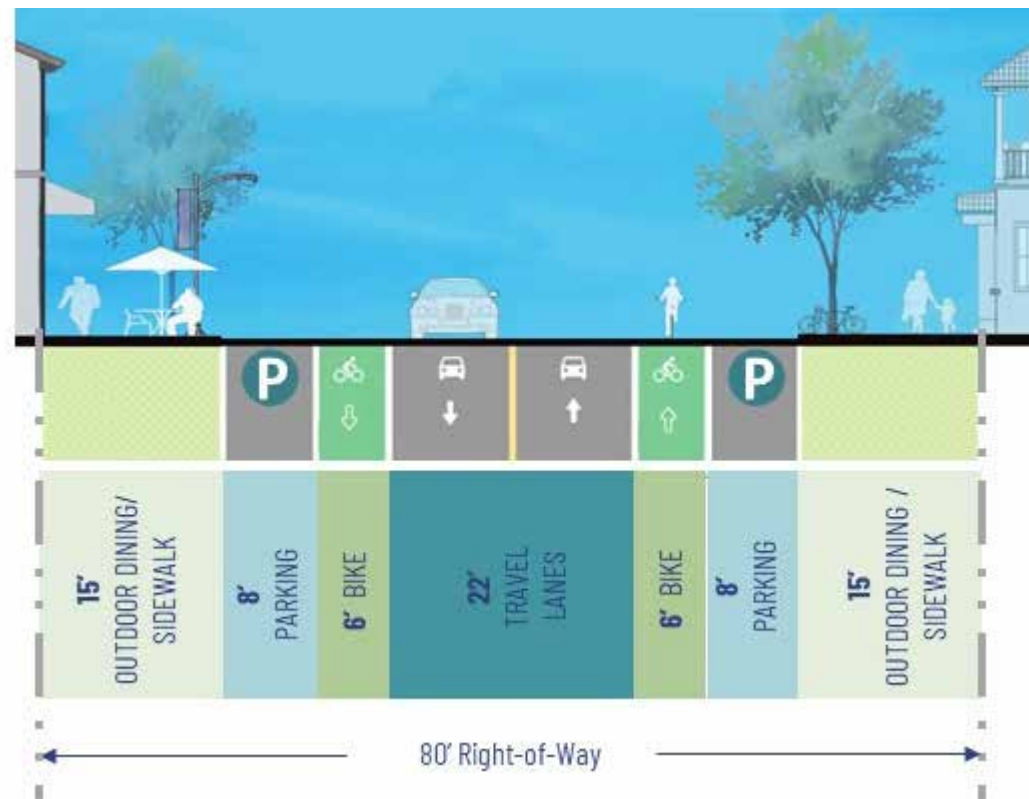


Figure 3.7 **Main Street Preferred Road Section**

Alternative Concept

The Bicycle Mobility Emphasis alternative concept for Main Street envisions enhanced cyclist comfort with Class II buffered bike lanes (see Figure 3.8, Main Street Alternative Road Section). Buffered bike lanes provide greater horizontal separation between cyclists and vehicular traffic than the existing Class III “sharrow” bike routes and can be enhanced with conflict-zone striping for increased visibility. The Bicycle Mobility Emphasis concept is expected to maintain a similar parking supply along Main Street as exists today, since parallel parking is maintained on both sides of the street.

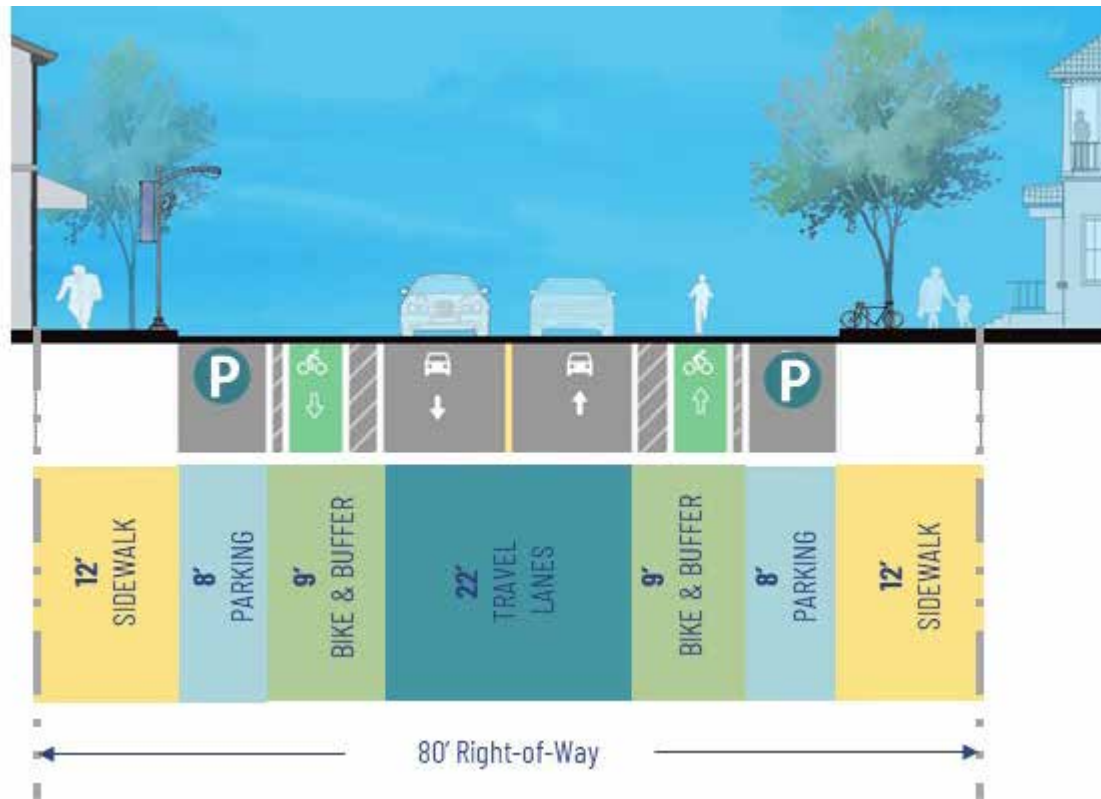


Figure 3.8 Main Street Alternative Road Section

2. Grand Avenue

Grand Avenue is a four lane east-west secondary arterial in Downtown El Segundo, with a raised center median. Grand Avenue provides parallel parking for the entire extent of Downtown on both sides of the street and includes median parking between Main Street and Concord Street. Grand Avenue is a dedicated bicycle route and truck route, and the speed limit is twenty-five mph.

The typical roadway cross section of Grand Avenue between Main Street and Concord Street is one hundred feet, with four eleven foot travel lanes (two travel lanes in each direction) with bike "sharrows", ten foot wide sidewalks, four eight foot parking lanes (including two along the median), and a four foot median (see Figure 3.9 Grand Avenue Existing Road Section). The cross section east of Main Street is similar, but it features a wider median that tapers off toward Eucalyptus Street.

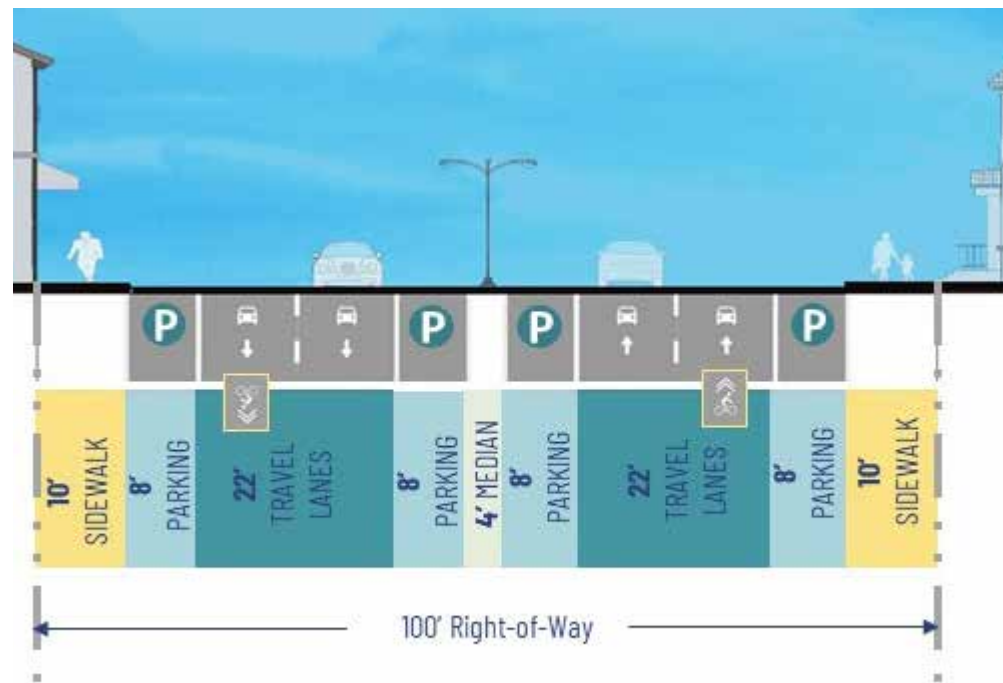


Figure 3.9 **Grand Avenue Existing Road Section**

Preferred Concept

The preferred Grand Avenue Pedestrian Mobility Emphasis concept envisions enhanced pedestrian comfort and outdoor gathering opportunities, with wider sidewalks and outdoor dining, while maintaining the existing Class III bike route “sharrows” (see Figure 3.10, Grand Avenue Preferred Road Section). This concept involves the conversion of parallel parking spaces on both sides of the street and along both sides of the median to angled parking to allow for wider sidewalks and outdoor dining and includes a widened central median. Though angled parking allows a higher parking space capacity over the same distance as compared to parallel parking, the removal of the median parking spaces would result in a net loss in current parking spaces along the corridor. Depending on final design, the net loss of parking on Grand Avenue under this concept could range from about ten percent to about twenty percent.

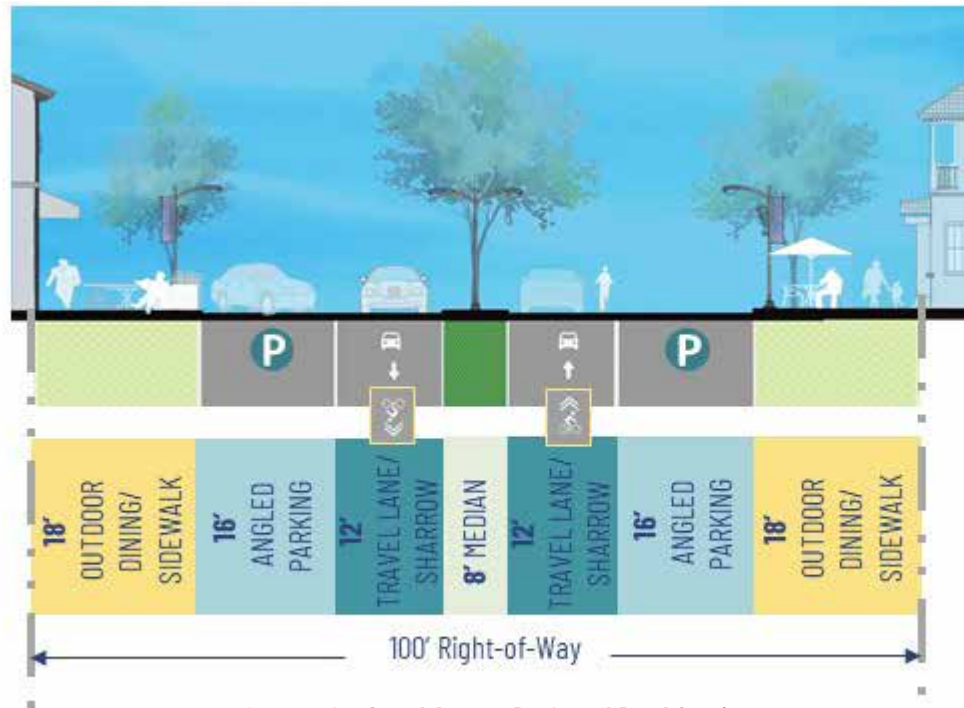


Figure 3.10 **Grand Avenue Preferred Road Section**

Alternative Concepts

There are two Bicycle Mobility Emphasis alternatives developed for Grand Avenue that provide enhanced cyclist comfort through the creation of dedicated bicycle facilities: Class II bike lanes and Class IV protected bikeway (Cycle-Track) which are illustrated in Figures 3.11 and 3.12.

- Class II Bike Lane Alternative:** The Class II concept envisions enhanced cyclist comfort with buffered bike lanes (see Figure 3.11, Grand Avenue Class II Alternative Road Section). Buffered bike lanes provide greater horizontal separation between cyclists and vehicular traffic than the existing Class III “sharrow” bike routes and can be enhanced with conflict-zone striping for increased visibility. As Class II bike lanes currently exist on Grand Avenue west of Downtown, these concepts would further connect El Segundo’s citywide bike lane network and increase mobility to, from, and through Downtown. The Bicycle Mobility Emphasis would provide about half the number of parking spaces as currently exists along Grand Avenue, as median parking would be removed, and curb lane parallel parking would be maintained.

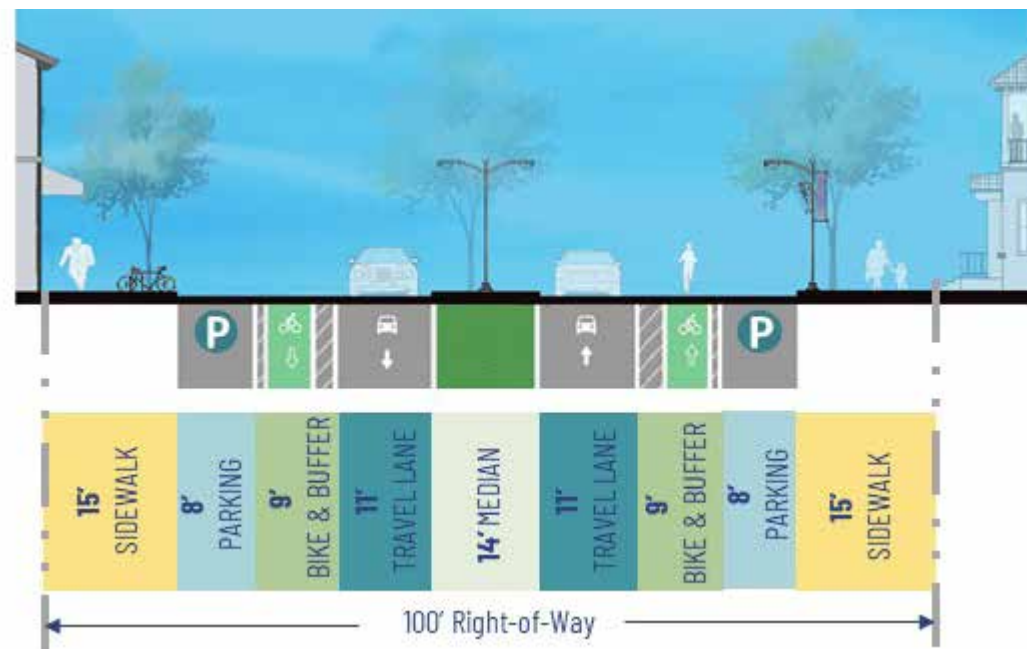


Figure 3.11 **Grand Avenue Class II Alternative Road Section**

- Cycle-Track Alternative:* The Cycle-Track concept includes a two-way Class IV protected bikeway on one side of the street (see Figure 3.12, Grand Avenue Cycle-Track Alternative Road Section). Class IV protected bikeways feature both horizontal and vertical (a lane of parked vehicles) separation between cyclists and vehicular traffic. The Buffered Bike Lanes concept provides greater horizontal separation between vehicle travel lanes and cyclists than the current Class III “sharrows” bike route, but not does provide protected facilities. However, vehicles wishing to ingress and egress the on-street parking must pass through the bike lanes and yield to cyclists, creating more potential conflicts than the Cycle-Track concept. The Cycle-Track concept would provide similar parking supply along the corridor to that of the Pedestrian Mobility Emphasis concept, with about a ten percent to twenty percent reduction in spaces.

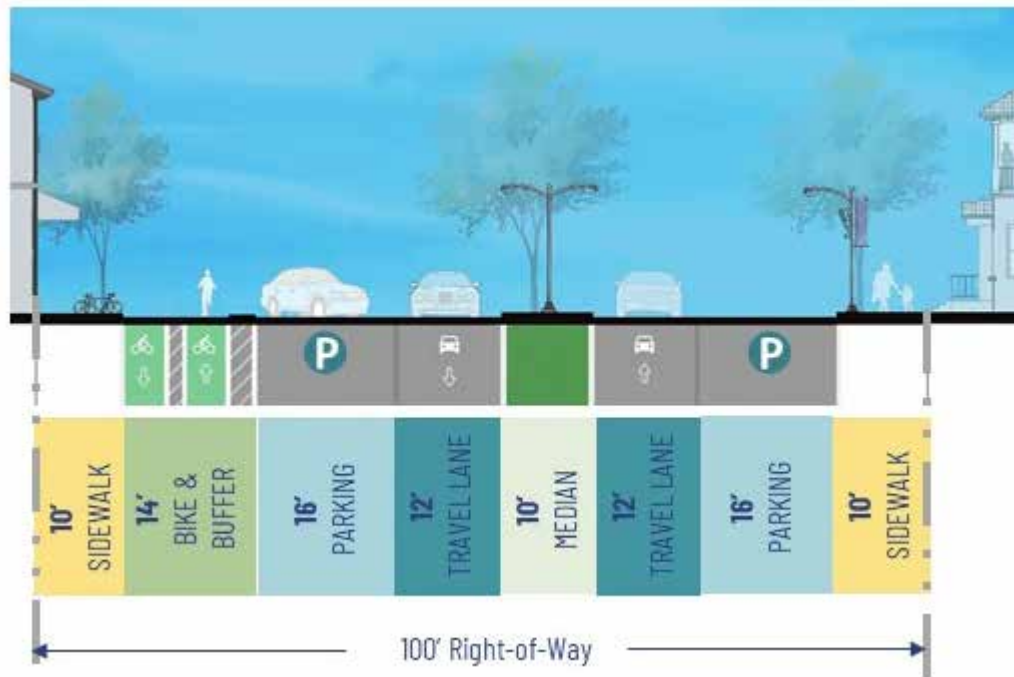


Figure 3.12 *Grand Avenue Cycle-Track Alternative Road Section*

3. Richmond Street

Richmond Street is a two lane north-south local street in Downtown El Segundo. Richmond Street provides on-street parking for the entire length of Downtown, and includes angled parking on the west side of the street between El Segundo Boulevard and the midblock crossing north of Grand Avenue. The speed limit on Richmond Street is twenty-five mph. Beginning during the COVID-19 pandemic, the half-block of Richmond Street south of Grand Avenue was temporarily closed to vehicular traffic to provide expanded outdoor dining opportunities. Additional options for flexible use of space for continued pedestrian comfort, outdoor dining, and events on Richmond Street are also discussed in Section E.5, Street Closure Placemaking. The typical roadway cross section of Richmond Street between Franklin Avenue and Grand Avenue is sixty feet and it consists of two eleven foot travel lanes (one in each direction), an eight foot wide sidewalk on the west side of the street, ten foot wide sidewalk on the east side, thirteen foot angled parking lane on the west side, and a seven foot parallel parking lane on the east side (see Figure 3.13, Richmond Street Existing Road Section).

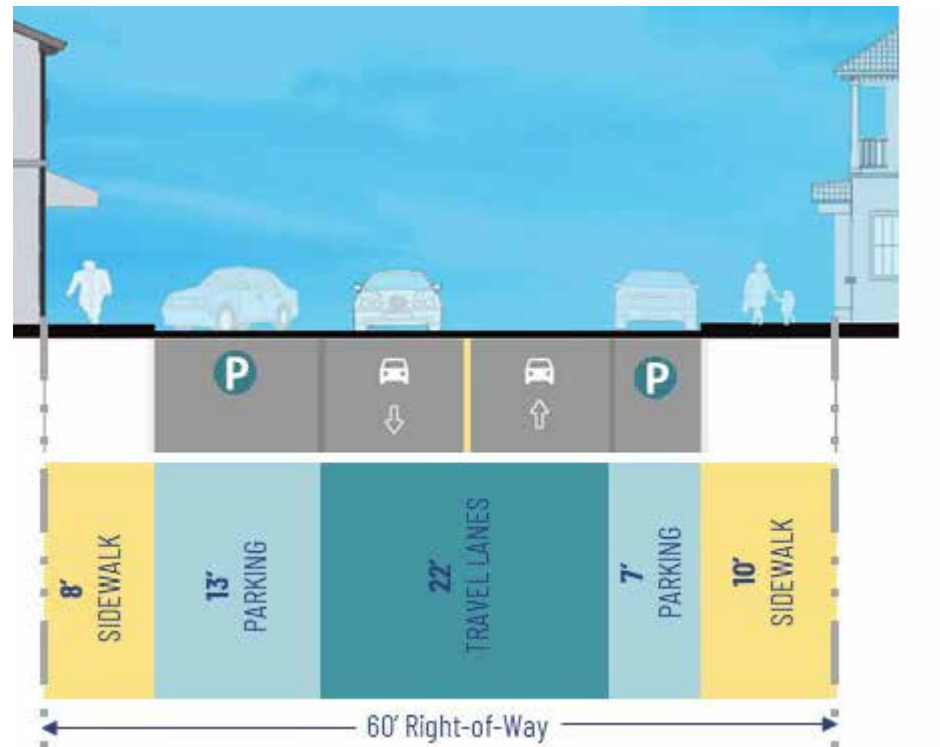


Figure 3.13 **Richmond Street Existing Road Section**

Preferred Concept

The preferred Richmond Street Sidewalk Dining concept for the area between Franklin Avenue and Grand Avenue envisions enhanced pedestrian comfort and expanded outdoor gathering opportunities with wider sidewalks and outdoor dining and the continuation of two travel lanes (see Figure 3.14, Richmond Street Preferred Road Section). This concept would result in the removal of all parking spaces on this portion of the street and assumes a future parking structure would be developed adjacent to Richmond Street. The Sidewalk Dining concept for Richmond Street would provide similar vehicular capacity to the existing road section.

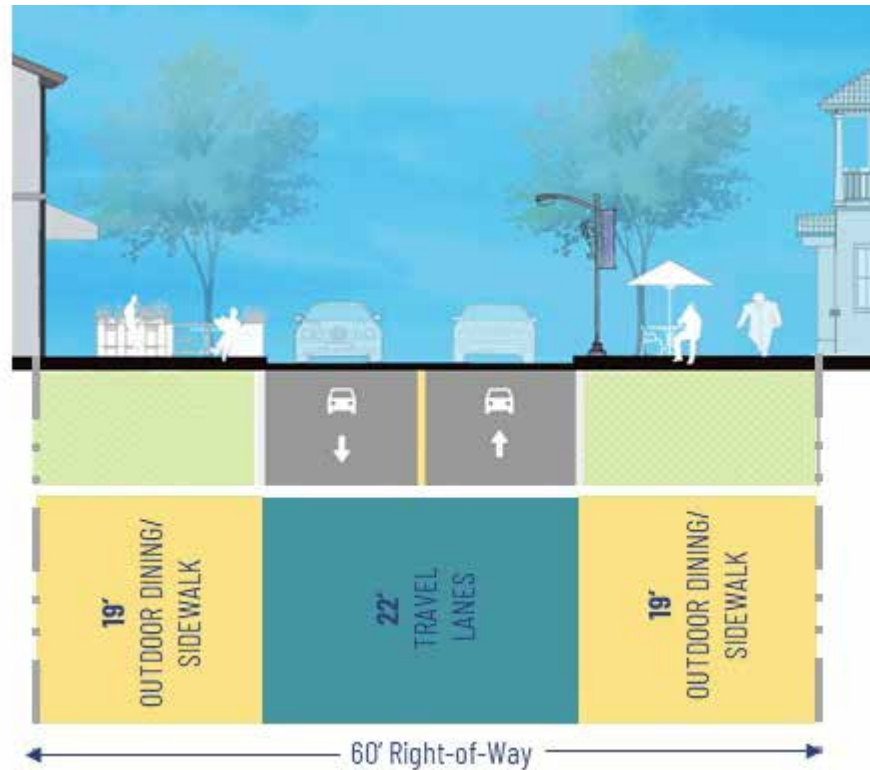


Figure 3.14 **Richmond Street Preferred Road Section**

Alternative Concept

The Pedestrian Mall concept between Franklin Avenue and Grand Avenue envisions enhanced pedestrian comfort and expanded outdoor gathering opportunities with wider sidewalks and the removal of vehicular travel lanes to allow for an expanded permanent outdoor dining area with increased gathering opportunities (see Figure 3.15, Richmond Street Alternative Road Section). The Pedestrian Mall concept would result in the removal of all parking spaces on this portion of the street and assumes a future parking structure would be developed adjacent to Richmond Street. The Pedestrian Mall concept for Richmond Street would permanently restrict vehicular traffic in this portion of the street, except for emergency vehicle access. Refer to Section E.5, Street Closure Placemaking, for additional information.



Figure 3.15 **Richmond Street Alternative Road Section**

4. Intersection Control

There are two signalized intersections in Downtown, at Main Street and Mariposa Avenue and at Main Street and Grand Avenue. All other intersections include one of the following control types:

- All-way stop control, in which vehicles on all approaches must stop.
- Side-street stop control, in which vehicles on side-street approaches must stop, while vehicles on major road approaches do not.

Downtown includes an extensive alleyway network, which provides access to off-street parking, business access, and truck circulation. Most intersections between alleyways and roadways are side-street stop-controlled, though many lack advance stop bars on the alley approach, which can increase right-of-way confusion and cause conflicts with cross-traffic pedestrians, bicyclists, or vehicles.

The following improvements should be considered to increase the multi-modal mobility of intersection control in Downtown:

1. Protected left turn phases could be added in all directions at the intersection of Main Street and Grand Avenue to reduce left turn conflicts with oncoming vehicles and pedestrians in the adjacent crosswalk.
2. All side-street stop-control intersections should include stop signs and stop bars on the controlled approaches to reduce right-of-way confusion.

5. Street Closure Placemaking

Street closures used for temporary or permanent public space add an opportunity for community gathering and establish a sense of community and provide locations for outdoor activities. These opportunities exist within many Downtown streets, but are currently implemented on portions of Main Street and Richmond Street.

Main Street

Main Street has in-road bollards that allow for temporary street closures for special events, such as the Farmer's Market. To continue serving Specific Plan Update objectives, including promoting a "village" character and a pedestrian friendly environment, this flexibility for temporary street closures should be maintained. Decorative paving is suggested in the travel lanes in this portion of Main Street to signify this special place. To enhance mobility throughout Downtown during closure events on Main Street, coordination and public outreach should be implemented as described in Section D, Public Transit.



Existing retractable in-road bollards on Main Street being used during Farmer's Market

Richmond Street

Beginning during the COVID-19 pandemic, the half-block of Richmond Street between Grand Avenue and Franklin Avenue was temporarily closed to vehicular traffic to provide expanded outdoor dining opportunities. This temporarily-closed area features dining tables and heat lamps to serve patrons of restaurants on the block.

During the public engagement period for the Specific Plan Update, one hundred and thirty stakeholders responded to the questions of “do you feel that Richmond Street between Grand Avenue and Franklin Avenue should be closed to vehicular traffic and redesigned as a pedestrian promenade?” Approximately eighty-four percent of respondents were in favor of this re-design, while another nine percent were in favor of occasional closure to vehicular traffic, similar to the current condition on Main Street.



Outdoor dining along Richmond Street during the temporary road closure



Pedestrian Malls provide Downtown placemaking opportunities and benefit the community with additional outdoor gathering areas

The temporary closure of the half-block of Richmond Street between Grand Avenue and Franklin Avenue should be expanded upon to provide ongoing placemaking opportunities and community gathering benefits to the Downtown, with one of the following options:

1. Permanently close the Pedestrian Mall segment using a combination of in-road bollards, similar to those on Main Street, and landscaping on both ends. The pavement could be resurfaced with pedestrian-scale material such as decorative concrete, pavers, or brick. This Pedestrian Mall is further discussed in Section E3.2, Richmond Street Alternative Concept.
2. Install in-road bollards or removable bollards at both ends of the Pedestrian Mall segment to allow ongoing temporary closures, while maintaining vehicle access during non-event periods.
 - a. In-road bollard receptacles could also be implemented to allow for temporary road closures for events for the existing road section of Richmond Street (shown in Figure 3.13), or in conjunction with the Preferred Sidewalk Dining concept (shown in Figure 3.14).

While providing ongoing outdoor dining and placemaking amenities, continued closure of this segment of Richmond Street would restrict vehicular access and result in the removal of approximately twenty on-street parking spaces.

F. Alley Enhancements

Alleys provide an opportunity to recapture underutilized public space for outdoor activity and can provide more engaging and welcoming public spaces, with enhanced pedestrian connectivity throughout the Downtown. Alleys are important because they provide for deliveries, services, and parking and they can allow for an alternative pedestrian route off the busy roadways and connects the public spaces proposed throughout the Specific Plan area. Alleyways in the Downtown are interconnected with paseos that link to key destinations and public parking areas. Two types of alley enhancements are proposed throughout the Specific Plan: Neighborhood Alleys and Service Alleys (see Figure 3.16, Alley Enhancement Map).

All alleyway enhancements should include:

1. Public art such as murals, paving insets, and sculpture
2. Street trees and landscape enhancements such as potted plants
3. Entry elements such as decorative paving and/or accent landscaping
4. Trash and recycling receptacle consolidation and concealment
5. Lighting and facade enhancements



Consolidated trash and recycling receptacles are concealed within elements that reflect the adjacent architecture

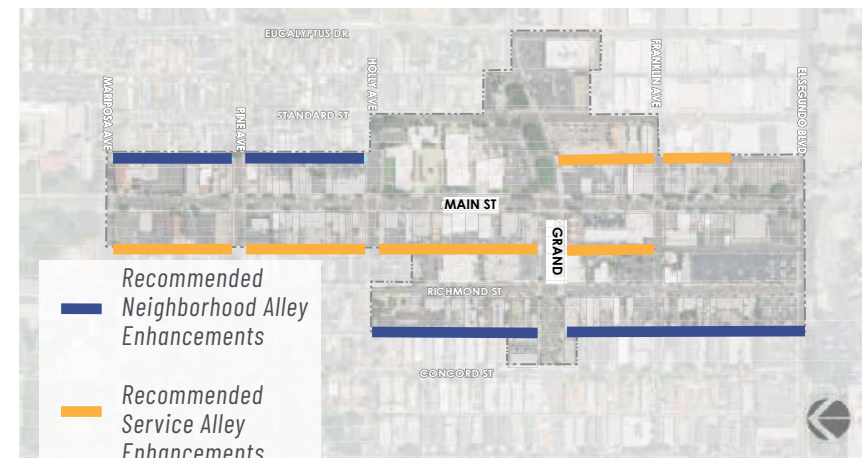


Figure 3.16 Alley Enhancement Map



Alleys provide an opportunity to provide more engaging and welcoming public spaces

BEFORE



AFTER



Alleyways with comfortable pedestrian spaces accentuated with landscaping, public art, and decorative paving link key areas of the Downtown

1. Neighborhood Alley Enhancements

Neighborhood alleys connect adjacent residential areas with enhanced pedestrian walkways linking to key destinations within the Downtown.

Neighborhood alley enhancements are proposed in the following locations (see Figure 3.16, Alley Enhancement Map):

- Alleyway between Main Street and Standard Street (between Holly Avenue to Mariposa Avenue)
- Alleyway between Concord Street and Richmond Street (between El Segundo Boulevard to Holly Avenue)

In addition to the requirements for all alleyways, neighborhood alleys should include:

1. Clearly defined pedestrian paths of travel with decorative paving
2. Shaded pedestrian seating and comfortable gathering areas
3. Key alleyway entrances should be highlighted with an overhead element, such as an archway, arbor, or trellis
4. Hanging and twinkle lights are encouraged but may not be placed adjacent to residential uses
5. Wayfinding and directional signage

Overhead elements are recommended in neighborhood alleyways but must maintain a twenty foot high minimum vertical clearance.

2. Service Alley Enhancements

Service alleys include enhanced pedestrian amenities blended and integrated with existing delivery and service uses.

Service alleys are proposed in the following locations (see Figure 3.16, Alley Enhancement Map):

- Alleyway between Main Street and Standard Street (between Holly Avenue to Mariposa Avenue)
- Alleyway between Concord Street and Richmond Street (between El Segundo Boulevard to Holly Avenue)

In addition to the requirements for all alleyways, service alleys should include:

1. Maintain a clear path for delivery and service vehicles with defined pedestrian paths of travel using elements such as decorative paving
2. Back patio and seating areas with bike racks and lockers
3. Directional signage and signage for key elements and historic landmarks

BEFORE



AFTER



Decorative paving, potted plants and pedestrian amenities create a welcoming and vibrant environment

G. Parking Strategies

As part of this Specific Plan effort, a comprehensive parking analysis was prepared to address current and future parking conditions within the Specific Plan area. In May 2022, an existing conditions parking analysis was conducted to evaluate supply and utilization of public parking within the Downtown Specific Plan area. The parking utilization study investigated the variety of public on-street and off-street spaces that exist throughout the Downtown, including the lots, structure, parallel, and angled spaces (see Figure 3.17 Parking Utilization Maps). This section further describes the current parking conditions by space type and includes discussion on future parking demand and optimization strategies.

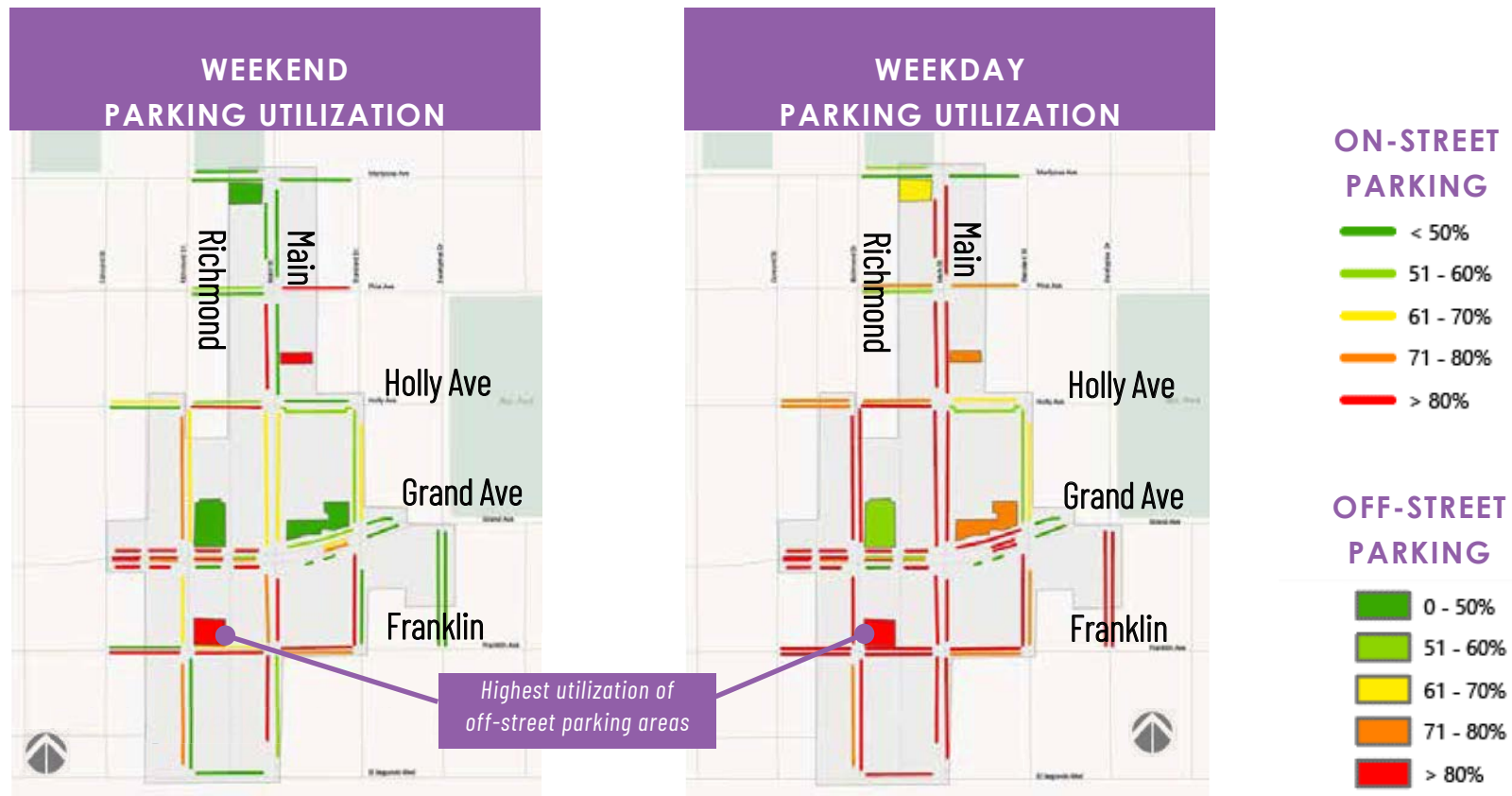


Figure 3.17 Parking Utilization Maps

1. On-Street Parking

During the Specific Plan Update community engagement period, over half of survey respondents stated that they prefer to use street parking when visiting Downtown El Segundo. Currently, free on-street parking is available along all streets in Downtown El Segundo, with a 2-hour time limit from 8am to 6pm for most spaces. Several short-term 20-minute parking spaces as well as accessible spaces are also provided. The design of parking spaces, angled or parallel, varies by street. The existing parking utilization study found approximately eighty percent and sixty percent utilization of the public on-street parking on the weekday and weekend dates evaluated, respectively.

Downtown Overview

Currently, all angled parking within Downtown is “front-in”. The following angled on-street parking facilities exist within Downtown:

- Mariposa Avenue (WB) from Main Street to western Specific Plan extent
- Richmond Street (SB) from south of Holly Avenue to southern Specific Plan extent
- Holly Avenue (EB) from Main Street to eastern Specific Plan extent

While many streets with parallel parking feature space-delineation striping, some do not. The following parallel on-street parking facilities exist along the street’s entire Downtown Specific Plan extent, unless otherwise noted:

- Main Street (both directions)
- Richmond Street (NB)
- Mariposa Avenue (EB)
- Pine Avenue (both directions)
- Holly Avenue (both directions) from western Specific Plan extent to Marketplace
- Holly Avenue (WB) from eastern Specific Plan extent to Marketplace
- Grand Avenue (both directions) from eastern Specific Plan extent to Main Street
- Grand Avenue (both directions, including median) from Main Street to western Specific Plan extent
- Franklin Avenue (both directions)
- Standard Street (both directions)
- Eucalyptus Drive (both directions)

The following on-street parking strategies should be considered to optimize supply and demand within Downtown El Segundo:

1. Stripe all available parallel parking spaces with delineation lines to minimize inefficient parking behavior and draw attention to available spaces.
2. Re-stripe parking spaces to be “back-in” to increase driver visibility of cyclists and other vehicles while exiting parking spaces.
3. Further investigate the feasibility of converting parallel parking spaces to angled parking spaces, where right-of-way allows.

The proposed streetscapes for Grand Avenue, Main Street, and Richmond Street, illustrated in Section E, Vehicular Circulation have varying effects on the on-street parking supply on those streets. Implications on parking supply for each proposed streetscape are discussed in this section and summarized in Table 3-1, On-Street Parking Supply Comparison.

Table 3-1: On- Street Parking Supply Comparison

Roadway Corridor	Corridor Extent	Existing Corridor Parking Supply	Streetscape Concept	Approximate Corridor Parking Supply with Streetscape Concept
Main Street	El Segundo Boulevard to Mariposa Avenue	108	Preferred Road Section (Pedestrian Mobility Emphasis- Class II)	108
			Alternative Road Section (Bicycle Mobility Emphasis- Class II)	108
Grand Avenue	Concord Street to Eucalyptus Street	100	Preferred Road Section (Pedestrian Mobility Emphasis- Class III)	80-90
			Alternative Road Section (Bicycle Mobility Emphasis - Class II)	50
			Alternative Road Section (Bicycle Mobility Emphasis- Cycle-Track)	80-90
Richmond Street	Franklin Avenue to Grand Avenue	32	Preferred Road Section (Sidewalk Dining)	0
			Alternative Road Section (Pedestrian Mall)	0

2. Off-Street Parking

There are five off-street public parking areas located throughout Downtown (see Figure 3.18, Public Parking Map). The largest surface parking lot, located at the northeast corner of El Segundo Boulevard and Richmond Street, is private and reserved for Chevron employee parking. Wayfinding signage is currently being used to direct visitors to off-street public parking areas throughout Downtown. Public surface lots are available at the El Segundo Civic Center, at the northeast corner of Franklin Avenue and Richmond Street, on the east side of Main Street between Holly Avenue and Pine Avenue, and at the southwest corner of Main Street and Mariposa Avenue. Various reserved customer and employee-only lots also exist throughout the Downtown, many of which are accessible via the Marketplace Alley.

There is one existing public parking structure within Downtown, located at the northeast corner of Grand Avenue and Richmond Street, which includes just over one hundred spaces. The structure has three levels and comprises approximately one-sixth of the block. There are three entrances and exits to the structure, on Grand Avenue, Richmond Street, and Marketplace Alley.

The new parking structures to replace existing public surface lots could be considered to help serve future parking demand, particularly for restaurant and retail uses, by increasing general off-street public parking supply. New parking structures could be considered at the northeast corner of Richmond Street and Franklin Avenue (higher priority), and at the northwest corner of Grand Avenue and Standard Street (lower priority) (see Figure 3.18, Public Parking Map). Refer to Chapter 2, Section G, Civic Center District and Section H. 5, Parking Structure Design for additional information.

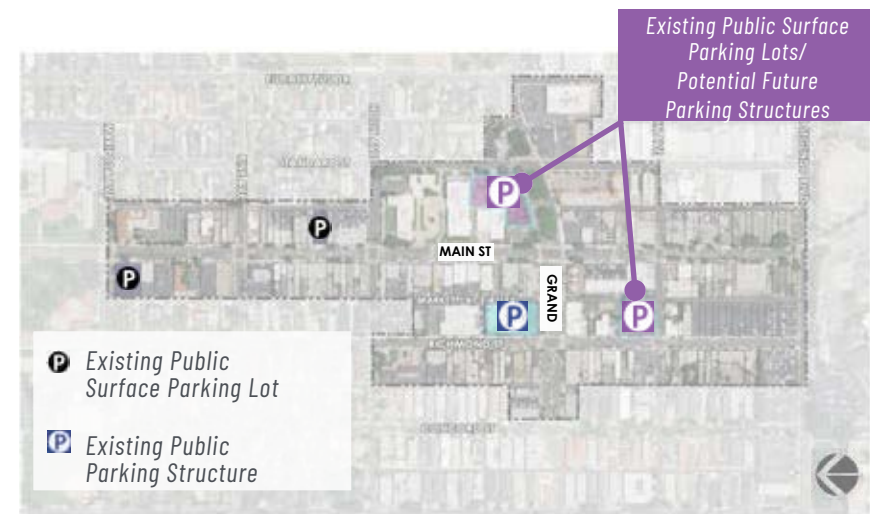


Figure 3.18 **Public Parking Map**

Existing surface parking lot at the Civic Center, located on the corner of Main Street and Grand Avenue





Existing parking structure signage in the Downtown



Entrance to the existing parking structure should be enhanced to more clearly depict a public parking garage

The existing parking utilization study found approximately seventy percent and fifty percent utilization of the public off-street parking on the weekday and weekend dates evaluated, respectively. In areas with district-wide parking such as Downtown El Segundo, 85% is an ideal utilization target. This target implies efficient use of supply while still allowing adequate vacant spaces to facilitate turnover and avoid excess driving to look for parking.

The following off-street parking strategies should be considered to optimize supply and demand within Downtown El Segundo:

1. Implement a shared-parking program in which businesses with different peak hours share reserved parking spaces to maximize capacity throughout the day.
2. Develop informational programs for drivers to direct parkers quickly and efficiently to available spaces and increase overall level of knowledge regarding parking availability in Downtown. Increased parking wayfinding signage on streets adjacent to public parking structures or on-line parking maps.
3. The existing public parking structure at the corner of Richmond Street and Grand Avenue should incorporate enhanced wayfinding signage to increase visibility and intensify use as a public parking area.
4. The existing public parking lot at the corner of Main Street and Mariposa Avenue should incorporate enhanced wayfinding signage to increase visibility and intensify its use as a public parking area.
5. Address parking demand for future office and residential uses specifically and incrementally:
 - a. Consider applying development conditions to projects, in addition to or instead of the in-lieu fee program, to require the potential for accommodation of shared use of parking.
 - b. Depending on future development activity, it is possible that provision of off-street parking in new developments could provide parking sooner than publicly developed structures.
 - c. Encourage or require subterranean garages for larger new development that is for office or residential use only. While more expensive than structures, this is preferable from a massing and urban design standpoint.
 - d. Pursuing these incremental adjustments to the parking supply based on land use allows more nimbleness in responding to travel changes through 2040. For example, telecommuting percentages could vary drastically depending on the type and quantity of office uses being developed.



4

**Public Realm -
Placemaking and Beautification**



CHAPTER 4: PUBLIC REALM – PLACEMAKING AND BEAUTIFICATION

A. Introduction

The Public Realm – Placemaking and Beautification chapter addresses street design elements, landscaping, gateway entry treatments, pedestrian paseos and alley enhancements, and other unique public realm features within Downtown El Segundo. The condition of the public realm is important for creating the desired image and identity of the Downtown and to provide a unified backdrop for the design of various building styles and types. Public realm improvements serve to improve an area's visual quality and act as an investment catalyst, encouraging private property upgrades and new development. The intent of this chapter is to provide guidance for the City of El Segundo in creating a unified and visually attractive environment that supports the Specific Plan goals for beautification of the Downtown.

The guidelines in this chapter are intended to be used as a planning tool for public projects and to guide development conditions of approval for private projects. These guidelines contain concepts, graphic material, recommendations, and design guidance that will aid in near-term implementation of public area improvements and they are also designed to reinforce the Planning Principles established within Chapter 1 of this document.

Planning Principles Related to Public Realm Beautification:



Designate the Core - Enhance the entrances and gateways into Downtown and develop the Civic Center Plaza as a focal point for the community with activities for all ages.



Entertainment and Arts - Provide attractive multi-use public spaces enhanced with public art for events, entertainment, socializing, and playing.



Streetscape Beautification - Ensure an enjoyable, comfortable, and beautified public realm with high-quality amenities and additional shaded seating and gathering areas.

B. Gateway and Wayfinding Signage

Signs are an effective method to reinforce the identity of an area through graphic arts. Distinctive brand and logos, catch words, colors and images can be displayed in an effective manner to advertise the desired image. Signs also are critical in providing consistency in messages and directions to destinations, such as public parking, public facilities, key retail centers, parks, and plazas.

A cohesive signage program for the Downtown should be developed which includes a logo, gateways and entry treatments, directional wayfinding signs (vehicular and pedestrian-oriented), and banners to provide consistency and unity within the Downtown. Gateway and wayfinding signage should be well lit at night and should incorporate a distinctive brand with complementary colors, materials, and lettering fonts to create a cohesive and unique design theme for the Specific Plan area and effectively direct vehicles and pedestrians to key locations.

1. Gateways and Entry Monuments

Gateway and entry monuments help announce important transitions when entering the Downtown and should be used to identify primary entrances into the Downtown. Gateway signage and entry monuments will help create an identity for the Downtown, announce this area as a special and unique place within the City, and promote the distinct identity of the Specific Plan area.

In addition to serving as entryways, gateways and entry monuments are important for directional and informational signs to guide motorists to their destinations. The visual design of gateways should be attractive as well as functional, conveying a sense of entry that reflects the importance of the Downtown and conveys the unique identity of the Specific Plan area. Physical elements of the gateway entries, such as signage, paving materials, and landscape planting materials, should function together to visually define the entry and establish a positive first impression of the Downtown. Increased landscaping at gateways and entry monuments will help emphasize the entrances to the Downtown.

Downtown El Segundo has existing gateway welcome signs located along El Segundo Boulevard at the intersections of Main Street and Richmond Street, at Grand Avenue at Concord Street and Eucalyptus Drive, and at Main Street and Mariposa Avenue. The existing Downtown welcome signs should be enhanced to provide more visibility to the key entrances of the Specific Plan area utilizing the guidelines in this section to clearly denote a sense of arrival. A new secondary gateway is recommended at the intersection of Richmond Street and Holly Avenue to define the entry into the Richmond District. A hierarchy of gateways should be provided throughout the Specific Plan area to accentuate entries and welcome visitors and residents and there are two types of gateways identified for the Specific Plan area: Primary and Secondary (see Figure 4.1, Downtown Gateways Map).

To create a unique identity and establish unity throughout the Specific Plan Area, a logo or themed sign program should be developed to distinguish this area and the chosen sign or logo should be repeated throughout the Downtown gateways.

1. Gateway signs should be colorful, lit for increased visibility, accentuated with landscaping.
2. Gateway signs should be prominently placed permanently at the back of the sidewalk or within raised medians to increase visibility for motorists, but gateway elements shall not obscure safe vehicular sight lines.
3. Where practical, gateway features should be placed on both sides of the roadway.
4. Gateway signs should be well proportioned, and the scale should be in proportion to adjacent buildings and landscaped areas.
5. Easily identifiable and aesthetically pleasing entrances should be designed to complement the style of the Downtown should be provided which utilize high-quality materials and fixtures that reflect the Specific Plan area's architectural character.

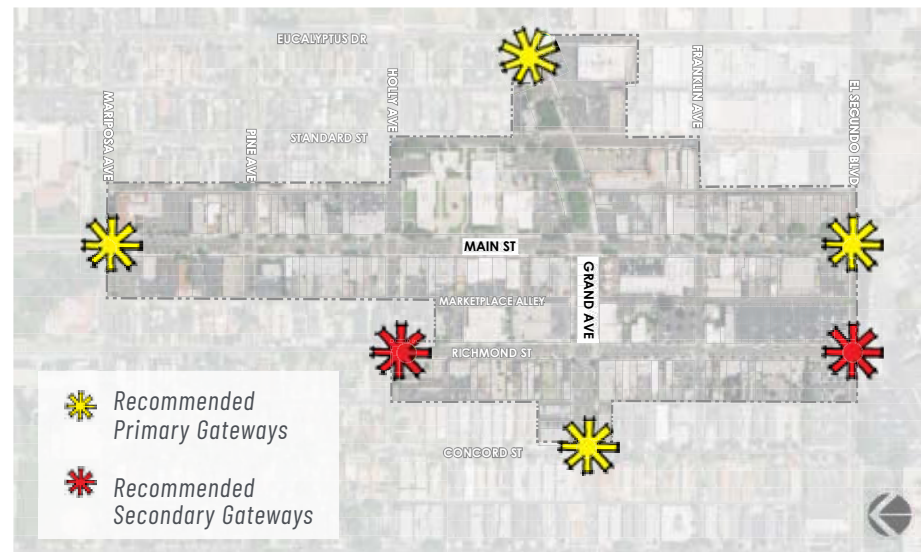


Figure 4.1 **Downtown Gateways Map**



Themed gateway signage should be easily identifiable and enhance the Downtown entrances



Gateway signage and accent features visually define the entries into the Downtown

Primary Gateways

Primary Gateways should include a combination of the following accent features where practical:

1. Primary gateway signage
2. Decorative walls with pilasters
3. Enhanced decorative paving (colored and textured) at intersections and sidewalks
4. Ornamental landscaping
5. Pedestrian scale accent lighting

Secondary Gateways

Secondary Gateways should include a combination of the following accent features where practical:

1. Secondary gateway signage
2. Decorative walls or fencing
3. Enhanced decorative paving
4. Pedestrian scale accent lighting

2. Vehicular Directional Signs

Directional signs should be located at key locations to direct vehicles through the Downtown. A clear and attractive directional sign system is vital in the Downtown is to provide direction to important services and destinations such as public parking, city hall, library, and performance venues.

1. The directional sign program should include a common directional sign with directional arrows and labeling to denote key shopping areas, public parking, civic buildings, and tourist attractions.
2. Directional signs should be oriented to vehicular traffic. Selected signs should be lit, landscaped, and placed permanently at roadsides or within medians at key locations around the Downtown. These signs shall be smaller than the City gateways but similar in style.
3. Directional signs should be smaller than the City gateways but constructed of similar materials and colors, and utilize the same fonts.
4. Signage should “explain the environment” around an individual and provide clear and accurate information to navigate.
5. Signage should only contain information that is relevant to the context of the area and not overburden an individual with unnecessary information.
6. Signage should be provided for local resident and visitors by providing information such as proximity to bus stops, and notable landmarks, and providing information on businesses and public parking areas,
7. New technology should be utilized, such as mobile applications, interactive kiosks, and digital parking systems within public wayfinding and signage programs.
8. Signage should relate in design to adjacent streetscape improvements such as site furnishings and lighting.



Wayfinding signage oriented to vehicular traffic defines the Downtown area and effectively directs visitors to key destinations in the Downtown



Wayfinding signage provides direction and helps to orient pedestrians around the Downtown

3. Pedestrian Wayfinding Signage

Wayfinding signage refers to any sign that provides direction and generally helps pedestrians find their way through the Downtown, navigate their location, and facilitate a smooth experience. A comprehensive approach to wayfinding should be developed for use by visitors and tourists which helps to orient pedestrians around the Downtown.

Downtown El Segundo has an attractive and cohesive wayfinding signage program installed at the Civic Center. Elements of this existing wayfinding signs are recommended to be repeated in the Downtown signage, such as the black color and fonts; however, some color is suggested to create more visual interest and character.



Existing wayfinding signage at the City Hall Complex

Directional Kiosks

A directional kiosk is a type of information display that helps people find their way through Downtown spaces. The kiosks are intended for pedestrian use and includes wayfinding information such as maps, directories, and directional displays with the goal of getting people from one location to another.

Directional kiosks should be located:

- Adjacent major transit stops and outside public parking garages.
- Within key Downtown areas such as the Civic Center Plaza, to inform and guide people to their intended destinations.

A unique directional kiosk should be developed to complement the overall Downtown signage and reflect the Downtown theme.

1. Directional kiosks should be the same size, shape, and color palette throughout the Downtown.
2. Kiosks should include Specific Plan area maps, city events information, and local business advertising space.



Directional kiosks guide pedestrians throughout the Downtown and can include information about local events and key destinations

C. Streetscape Design and Pedestrian Amenities

This section describes the streetscaping elements and improvements that create a special identity for the Downtown. The Specific Plan area will have consistent streetscape treatment throughout all districts to develop a unified theme and atmosphere for a cohesive Downtown. The streetscape improvements described in this section are a key ingredient in changing the predominant character of the area from an auto-oriented environment to a pedestrian-oriented Downtown, and distinctive design treatments and pedestrian amenities will create the character and sense of place and create an easily identifiable and distinctive Downtown core.



Main Street's distinctive design treatments and pedestrian amenities create a sense of place and distinctive Downtown core

1. Street Furnishings and Improvements

Street furnishings consist of amenities placed within the public right-of-way, such as decorative streetlights with banners, benches, trash and recycling containers, bicycle racks, and bollards to define special edge conditions, and special attractions at select locations such as public art and other focal elements. Street furnishings serve an aesthetic as well as utilitarian function and can enliven and provide variety to outdoor spaces used for public interaction and serve to attract pedestrians and create a lively and festive atmosphere. Streetscape elements and amenities should be selected for their durability and ease of maintenance along with their ability to create timeless visual appeal, and to upgrade the function and attractiveness of the urban environment.

Downtown El Segundo has an attractive and cohesive street furnishings program in place which includes elements such as benches, bike racks, and trash receptacles. The existing furnishing program is recommended to be continued and enhanced using a combination of streetscape improvements to further define the Downtown character and better reinforce a unified design theme for the Specific Plan area, and the use of color to accentuate key locations.

Locations of street furnishing shall be determined through the implementation of this Specific Plan and review of public improvement design plans. Some of the envisioned public improvements will require private property owner participation and/or cooperation at the time of project development.

1. Street furniture should be located along street edge of sidewalk. Provisions to accommodate persons with disabilities shall be incorporated into the design and location of furnishings. This includes a provision for space adjacent to walkways for wheelchair and/or stroller parking.
2. To create a more organized and efficient use of sidewalk space, furnishings should be grouped together rather than scattered. Trash and recycling cans shall be located near benches. A greater frequency of the number of furnishings should be in higher-use pedestrian traffic areas.
3. Street furnishings should be selected to ensure maintainability, durability, and vandal resistance.
4. Items should be securely anchored to the sidewalk, and a graffiti-resistant coating shall be applied to street furniture elements to ensure a good longer-term appearance.
5. Outdoor furniture shall be provided in public gathering spaces to encourage pedestrian activity. Design of materials and colors of outdoor furniture and hardscape elements shall complement surrounding building architecture. Black color should be used for street furnishings in the right-of-way, with the use of a bright accent color for alleyway and paseo furnishings.
6. Placement of street furnishings can be temporary or permanent, and either fixed or movable, depending on location and use.



Existing Downtown benches, trash receptacles, and bike racks

a. Benches and Trash Receptacles

Benches provide areas for resting or socializing and trash receptacles contribute to the maintenance and beautification of the Downtown area and should be placed to improve the pedestrian experience.

1. Where feasible, it is preferable to design seating areas with benches and/or chairs located in an L-shape to allow for social interaction.
2. Where single benches are used, they should be oriented to the street or primary walkway.
3. Benches should be placed every one hundred (100) feet to three hundred (300) feet apart to provide convenient and attractive resting places along the street.
4. Benches with a back and arm rests should be utilized to prohibit sleeping and benches should be clustered with trash receptacles, street trees, street lighting, and other key furnishing elements to create comfortable and inviting seating areas in the Downtown.
5. Trash and recycling receptacles should be placed to provide convenient waste disposal in key locations such as entries, seating areas, bus stops, and along walkways throughout the Specific Plan area.
6. Trash receptacles should be used in conjunction with other furnishings and should be placed away and/or located downwind from seating areas where feasible.

b. Tree Grates

Tree grates should be used around street trees to expand the usable space within the pedestrian realm and create a distinctive sense of place. Tree grates provide for increased pedestrian area on the sidewalk while reinforcing the desired urban character.

1. The use of tree grates is required where street trees are proposed to be in the sidewalk area.
2. New tree grates should be safe for pedestrian use as a walking surface and must comply with the Americans with Disabilities Act (ADA) requirements.
3. Tree grates should have breakouts that are easily removed as the tree grows and may include light openings for up lighting.



Tree grates should be used to expand the usable pedestrian space and create a distinct sense of place and urban character

c. Bike Racks

Well placed and secure bike racks will encourage bicycle ridership and promotion of alternative forms of travel in the Downtown area. The existing Downtown bike racks with the Downtown El Segundo logo should be continued throughout the Specific Plan area with additional bike racks located at public plazas, paseos, transit stops, parking structures and parking lots, and popular destinations in the Downtown. The existing black color should be continued within the public right-of-way, with brighter colors used on bike racks within alleyways, paseos, and parking areas to increase visibility.

1. Bike racks should be installed at highly visible locations that are well lit and as close to the main entrance of the destination as possible and placed in the most convenient space available.
2. Bike racks should accommodate a minimum of two bicycles and their capacity should be determined by the location and the number of bicyclists who frequent the destination.
3. Bike racks should be located to not block pedestrian circulation when bikes are on the racks, or when maneuvering bikes to and from racks. Bicycle rack placement shall maintain at least six feet clearance from curb lines, street trees, street furnishings and building storefronts to allow for bicycle maneuvering. Where feasible, bicycles should be parked parallel to the sidewalk to keep the maneuvering of them out of the pedestrian zone.

d. Bus Shelters and Transit Stops

Bus shelters and transit stops are important elements for Downtown circulation needs.

1. Locate throughout the Downtown, and have a unifying, clean, and uncluttered appearance.
2. Provide benches and lighting for the comfort of passengers waiting for their transit vehicle and take the needs of disabled users into consideration.



*Bus shelter on Main Street
in front of City Hall*



Existing vehicular (left) and pedestrian scale (right) streetlights in the Downtown

Existing decorative poles with hanging plants on Main Street

e. Pedestrian Scale Lighting

Street lighting plays both an aesthetic and safety role in the Downtown. The Downtown pedestrian lighting should contribute to the safe and efficient use of Downtown streets, alleys, and paseos. Pedestrian scale lighting shall be provided along sidewalks and pedestrian pathways, particularly in areas where street beautification and higher pedestrian use is desired, such as transit stops and along Main Street, Grand Avenue, Richmond Street, and within the Civic Center District area.

Downtown El Segundo has an existing vehicular scale streetlight with single and double arms that utilizes a distinctive bell-shaped street light fixture and includes a flag and banner attachment. Additionally, there are existing decorative poles with hanging plants installed in the Downtown. Richmond Street has pedestrian scale light poles installed which help define the historic character and create a sense of pedestrian scale. The existing light fixtures and hanging planters are recommended to be continued in the Specific Plan area with pedestrian scale fixtures added on the sidewalk side of the primary roadways where feasible for increased human scale, safety, and visual interest. Pedestrian scale accent lighting should be added to paseos and alleyways to develop a more cohesive and active pedestrian focused Downtown environment.



Pedestrian scale lighting include banners and hanging plants to maximize visual interest

Consider integrating decorative accent lighting in key locations

1. Pedestrian lighting should be human scaled and placed evenly along sidewalks to enhance security and encourage evening activities and help to unify the Specific Plan area.
2. Integrate a variety of different lighting types and intensities at entries, public gathering areas, parking lots and other areas where evening activity occurs will help to create an exciting nighttime environment.
3. Provide "Twinkle" or similar string lights in street trees within key pedestrian areas to enhance the nighttime environment. String lighting and up lighting is suggested at accent areas such as primary intersections, public plazas, and outdoor dining and gathering areas and shall be located twenty feet minimum above roadway grades and not obstruct traffic.
4. Accent up lighting on trees and focal points is encouraged at key locations where a high level of nighttime pedestrian activity or views are anticipated.
5. Bollard lighting should be used to define public plazas and walkways, to delineate pedestrian zones from vehicle traffic at intersections, and to create a refuge for pedestrians near alleyways.
6. Over lighting of sites should be prevented to avoid ruining desired nighttime ambiance. The quality of light, level of light and type of bulb or source should be carefully selected so that lighting levels do not draw attention to the glow or glare of the project site.
7. Energy-efficient lighting (lighting from renewable sources and energy-saving devices, such as light sensors) is required. Where feasible, use warm white lighting source types.
8. Use full or partial cut-off lighting fixtures to minimize light pollution and glare. Timers and sensors should be incorporated to avoid unnecessary lighting.
9. Electrical service for seasonal/event lighting in all streetlights and at street trees shall be provided and all public plazas and at key intersections along Main Street and Grand Avenue.
10. Streetlight poles should be equipped with an additional hanging or cantilevered fixture to allow for the attachment of banners.



Accent lighting enhances and activates the nighttime environment



An example of an existing banner in the Downtown



An existing bollard in front of the Old Town Music Hall on Richmond Street



Decorative bollards delineate primary pedestrian areas and create a safer walking and gathering environment



f. Street Banners

Banners are an easy and inexpensive way to promote the theme of the Downtown. Banners can enhance the aesthetic environment, unify the appearance of the streetscape, and introduce color and a sense of cohesion to an area. Banners can also communicate and promote annual cultural and civic events and seasonal holiday displays. Banners may be changed periodically to provide advertisement for special events and promotions.

1. Banner should be clearly legible, and designed to be compatible with the Downtown area signage and gateways.
2. Lettering should be clear, precise, and simple, with minimal graphics to avoid distracting motorists and creating traffic hazards.
3. The City logo should be an integral part of the sign design to reinforce the unique character of the Downtown Specific Plan area.

g. Bollards

Properly placed, bollards help to delineate between vehicle and pedestrian zones, creating a safe walking environment. Retractable bollards, such as those existing on Main Street just north of Grand Avenue, allow for temporary roadway closure while maintaining vehicle access during non-event periods.

1. Waist-high safety bollards should be used to define selected sidewalk extensions, plazas, paseos, and key outdoor seating areas.
2. Bollards should be reflective of the primary adjacent architectural elements, such as color and style.
3. Bollards should incorporate lighting at key public gathering areas.

h. Skate Protection

Skate Stops and anti-skating hardware devices designed to prevent skaters from using street furnishings, walls, stairs, and raised planters for performing stunts should be installed in areas where protection is anticipated, such as plazas.

1. A custom skate stop should be utilized that adds character and aesthetic appeal and is consistent with the primary adjacent architectural elements.
2. Skate stops must allow for continued public use of the element being protected.

i. Decorative Paving

Decorative paving should be utilized throughout the Specific Plan area to develop a recognizable sense of place and is suggested at entrances and recommended to combine with other streetscape elements to maximize the visibility and impact of key areas in the Downtown.

The Specific Plan area has utilized an attractive and cohesive decorative paving at sidewalks and crosswalks at intersections along Main Street and Grand Avenue that consists of stamped concrete with a random stone pattern in a tan color. The Heritage Walk is designated throughout the Downtown with circles inset in the sidewalk paving in a playful linear pattern along the frontage. The existing Heritage Walk circles and intersection paving should remain and be implemented throughout the Specific Plan area along with decorative paving enhancements in key locations.



Decorative skate protection adds character and visual appeal to streetscape elements



Existing decorative paving in the Downtown with Heritage Walk circles located along the street





A variety of cohesive decorative paving materials creates vibrancy and identity for the Downtown

In addition, cohesive decorative paving with bolder colors and patterns that are consistent with the architectural character of the Downtown should be used in the following locations of the Specific Plan area to create vibrancy and identity for the Downtown:

- Key intersections, gateways, primary alleyway entrances, paseos and plazas, primary pedestrian entries to buildings, outdoor dining, bicycle parking areas, and outdoor seating areas.
- Within travel and parking lanes so the street can be better utilized as a community gathering areas during street closures for temporary events at:
 - Richmond Street between Franklin Avenue and Grand Avenue
 - Main Street between Grand Avenue and Holly Avenue

Decorative paving materials should be unique and recognizable, durable, timeless, non-slip and ADA accessible. Special attention should be made to the selection of a variety of cohesive paving materials to accentuate key areas and create the Downtown area as a unified pedestrian friendly and special place.

1. Decorative insets are recommended within paving throughout the Downtown to highlight the local culture and history, such as mosaics and tiles inset in paving with historic images, or concrete etching or plaques commemorating El Segundo's history, natural environment, and culture.
2. Old and historic paving (including decorative tiles and old contractor stamps and dates) shall be maintained and repaired rather than replaced with new paving, where feasible.
3. Decorative paving areas should incorporate infill doors for utilities to match the surrounding paving materials and colors.
4. Enhance parking lots and key parking areas using decorative paving materials that create visual interest and reduce the visual impact of parking areas. The use of permeable paving materials consistent with City building codes are recommended to minimize runoff.
5. Decorative paving within vehicular areas, such as travel lanes, crosswalks, alleyways, parking areas, and applicable plazas, outdoor dining, and paseos shall be rated for vehicular use. Where emergency vehicle access is required, paving shall be rated to withstand loads of emergency vehicles.

D. Public Art

The use of public art within the Downtown is an effective way of expressing the unique personality and character of the community. Public art is one of the most desirable elements to personalize an urban environment and connect it to a community's own unique and special character. Public art should serve as an aesthetic improvement to enhance the pedestrian environment and should focus on the region's local culture, environment, and history.

The Specific Plan area contains the El Segundo Museum of Art and several existing murals, and the Downtown has an established art character and influence. The City of El Segundo hosts an Art Walk in June, July, and August where local businesses act as pop-up galleries and art studio to display original local art works and the event draws visitors to the Downtown area.

Public art is suggested in the following locations:

- Key intersections and entries
- Accent focal points in alleyways, paseos, and plazas
- Primary bus shelters, outdoor dining, and major bicycle parking areas

Art and focal points placed within the Downtown should represent the community, showcase the culture and history of El Segundo, and/or capture or reinforce the unique character of place.



Murals contribute to the special character of the Downtown and can reinforce the culture and history of the area



Existing public art on above ground utility panels



Tree grate incorporating decorative placemaking features



Public art is encouraged in a variety of sizes and forms throughout the Downtown to create a lively and evolving streetscape that is unique to El Segundo

1. Art can be integral to other public improvements, such as unique benches and trash containers, decorative streetlights, signs, and paving patterns or it can be used as a special placemaking feature and integrated into gateways, stair risers, railings, fencing, walls, or raised pilasters. Manhole covers, drain grates, above ground utility panels and tree grates within key public spaces should be designed as decorative features to enhance the pedestrian streetscape environment.
2. Larger pieces of public art, such as interpretive sculptures and murals representing the area's unique history and people of significance, can be used as a wayfinding feature to attract pedestrians to key locations such as a plaza or paseo.
3. Public art is encouraged on large blank walls in alleyways and paseos and is recommended on the existing public parking structure located at the corner of Grand Avenue and Richmond Street.
4. Public art should be in conjunction with other site features such as a plaza or architectural feature and be an integral part of site development rather than a stand-alone, separate object. The selection and placement of public art should be part of the overall site design process, rather than an afterthought to a project.
5. Public art is encouraged that invites participation and includes interactive interpretive exhibits and displays are recommended.
6. Public art should be placed to avoid locations where it may obstruct a pedestrian pathway, create a traffic hazard, or compete with another piece of art within the area.
7. Public art should be highlighted with decorative paving and accent lighting where appropriate.

E. Landscaping

Landscaping is a key element to creating unified street scenes and softening otherwise discordant roadways. Adding scale, comfort, foliage colors, and textures contribute to the Downtown's unique identity and help improve air quality. Landscaping should be layered with a variety of shapes, textures, and colors and utilize drought-tolerant and California native plants to reduce irrigation and conserve water. Planting areas should use a combination of trees, shrubs, and ground cover to enhance the appearance and enjoyment of the Downtown and soften the visual impact of buildings and paving. Landscaping provisions of ESMC Chapter 15A in regards to water conservation should be met, such as 15-15A-5, landscape documentation package and water efficient planting and irrigation requirements.

Trees and understory planting should be selected based on leaf and flower color, and it is recommended to be highly selective with color and limit planting to either warm or cool colors. Avoid sharp contrasts in color except where desired for accent planting and provide transitions between warm and cool colors with neutral greens, whites, and grays. Consider the texture of leaves and bark in the selection of plants and maximize contrasting textures where feasible for increased visual interest.

Landscaping for the Specific Plan area should be well adapted to the climate in El Segundo, and the use of drought-tolerant species are recommended. In addition, mulch should be applied during construction and throughout the life of the plants to retain soil moisture and enhance plant growth.



The landscape character along Main Street provides texture and color to create a unified streetscene that contributes to the Downtown identity



Large scale trees with ornamental foliage and/ or dense canopies for shade contribute to a vibrant and comfortable Downtown

Plants within the Downtown Specific Plan area should meet the following minimum size requirements at time of planting:

- *Large Evergreen Trees:* 24-inch box or larger typical, with thirty percent or more in 36-inch box
- *Large Accent Deciduous and Specimen Trees:* 24-inch box or larger typical, with forty percent or more in 36-inch box, and ten percent or more 48-inch box
- *Small Accent Deciduous Trees:* 15-gallon containers or larger
- *Vines and Espaliers:* 15-gallon containers or larger
- *Large Shrubs - greater than five feet in diameter:* 5-gallon containers or larger
- *Small Shrubs (excluding groundcovers) - less than five feet in diameter:* 1-gallon containers or larger

1. Street and Median Tree Planting

Tree species should be selected for suitability within the Downtown boundary and within the specific area to be planted. The overall selection of tree species should be based upon the tree’s overall ability to provide pedestrian-friendly benefits, such as shade from summer heat, storefront visibility and general aesthetics which contribute to a vibrant downtown. Species should be hardy and not easily affected by extreme temperatures, wind, water supply, or handling. Highly visible areas, such as seating areas, gateways, and intersections, should be planted with ornamental and interesting species that exhibit contrasting foliage, color, and texture. Trees should not interfere with necessary sight distance lines for passing traffic. The selected tree species should require minimal maintenance and should exhibit a clean and healthy appearance in all seasons of the year.

Street trees should provide visual interest as well as complement the streetscape. Trees should be designed to contain a mix of deciduous and evergreen species for seasonal interest and year-long shade. In general, place deciduous accent trees at entries, intersections and driveways and locate evergreen trees along extent of the corridor. Deciduous trees with open branching are suggested at retail areas to provide views of the facades and shade trees with dense evergreen canopies should be used in front of residential uses to provide privacy. Deciduous trees that provide summer shade and allow for winter solar gain should be utilized whenever possible adjacent to buildings. Evergreen trees with a high, broad branching structure are encouraged along walkways and parking areas to shade walking surfaces and parking spaces.

1. Street trees shall be spaced approximately twenty feet to forty feet on center and shall be provided to form the canopy, provide shade, introduce seasonal color, and define the street edge.
2. For each block on a street, no more than three street tree species are recommended. A mix of deciduous and evergreen species should be provided for year-round shade and interest.
3. Street tree placement shall be carefully considered to avoid conflicts with functions of adjacent businesses. The trees should not block views of storefront businesses or signs to the greatest extent possible. The location of trees should be planned to provide openings for street lighting and utilities and continue to allow for viewing building entrances and historical facades.
4. Trees along walkways and parking areas should be carefully selected with the objective of providing shade and minimizing maintenance and litter.
 - a. Trees with thorns or spiky leaves and a high amount of litter and leaf drop should not be used in parking areas or along pedestrian walkways.
 - b. Trees with wet fruit or large seed pods may be utilized but should be setback away from any paved areas including sidewalks, streets, and parking lot paving.
 - c. Trees should be selected to be low maintenance with minimal leaf drop and selected for long-lived and disease resistant species.
5. Tree species that are suitable to the size of the planting area and which carry minimal risk of raising gutters and sidewalks should be selected. Trees should be selected based on the size of the planter to minimize root intrusion, and the height of the adjacent structures to soften views.
 - a. Trees adjacent to buildings should have mature sizes in scale with the massing and height of the structure.
 - b. Trees with lower heights and low root damage potential are recommended for small planter areas and accent planting areas.
 - c. Trees within five feet of hardscaping, walls and foundations should have low root damage potential and be installed with root barriers to prevent roots from encroaching and the buckling of pavements and structures.



Tree grates increase usability of the sidewalk and enhance the urban character



Large established Ficus trees in the median on Grand Avenue

6. Trees should be located so the canopy will not conflict with light poles and roots will not impact underground utility lines.
7. For areas with new street trees, structural soil should be used to encourage root spreading to minimize sidewalk displacement and curb, gutter, street and/or infrastructure damage. Install structural soil systems to direct new root growth downward below hardscape areas to help minimize root damage caused to the surrounding hardscape and structures.
8. Trees that provide attractive fall colors, seasonal flowers, or large amounts of shade are preferred for the Downtown. Flowering trees should be used in areas such as gateways, key intersections, mid-block pedestrian crossings, and other focal points that deserve visual emphasis.
9. Tree grates are suggested within sidewalks and plaza spaces, as these allow for improved accessibility and increased sidewalk usability area and are consistent with the desired urban character. The ultimate size of the tree trunk should be considered when choosing grates; the grate opening should be appropriately sized to accommodate a mature tree.
10. Existing large, mature, and healthy street trees should remain where feasible, such as the Ficus trees in the median on Grand Avenue.

2. Sidewalk Parkway and Median Shrub Planting

Sidewalk parkway planting in the Specific Plan area should include shrubs and groundcovers within a variety of configurations such as planter pots, landscaped planters/parkways, raised planters, plaza landscaping, and parking lot screening and shading.

Sidewalk parkway planting should consist of a mix of plants that will provide year-round interest. Seasonal flowers and evergreen shrubs in parkways, potted plants, and raised planters are encouraged where there is sufficient sidewalk space. Perennial and deciduous species and seasonal grasses should not make up the mass of planting areas, and longer-lived evergreen shrubs should be intermixed throughout to provide year-round interest and longevity.

To achieve a cohesive appearance and maintain the urban landscape, joint participation between private property owners and the City will be required. Some of the beautification efforts can be simply implemented by the City as funding is secured. Cooperation and participation by individual property owners, merchants, special interest groups, and others will be required with the future property development.

Existing sidewalk parkway planting along Main Street



Integrate a variety of landscaping with planter pots and raised planters

1. Choose ornamental and interesting species for highly visible areas such as near seating areas, gateways, and intersections. Use plants with contrasting foliage, color, and texture; scented varieties; or those that have an especially interesting bloom or special qualities (e.g. spring flowers and/or good fall color) to unify the Downtown and identify it as a place of special destination.
2. Choose species that need minimal maintenance and tend to look good all year to ensure a clean and healthy appearance. Parkways and medians should utilize low maintenance, long-lived, and durable plantings.
 - a. The use of perennials should be minimized and are suggested at key focal points and gateways only.
3. A variety of accent species with flowers, grasses and/or succulents should be used for accent and other unique functions in appropriate locations, such as at corners, mid-block crossings and gateways.



Ornamental shrub plantings with contrasting foliage and texture accentuate focal points, key intersections, and gateways

4. Plants with thorns, spines, or sharp leaves should not be used along pedestrian areas and plants that attract bees or are poisonous should not be used at pedestrian seating areas.
5. Choose species that are hardy and not easily affected by extreme temperatures, wind, water supply, or handling. Near pedestrian traffic, it is important to anticipate some amount of damage to plants and irrigation, and tougher plant materials will help to maintain an attractive streetscape appearance.
6. Potted plants and raised planters should be used along the streetscape to add color and visual interest and be located at entries and corners as accent elements. Raised planters should be designed to accommodate comfortable seating where feasible and incorporate decorative insets and elements such as tiles and skateboard deterrents.
7. Plantings should be used to soften and screen blank walls and fencing, parking areas, utilities, and service areas. Dense and fast-growing evergreen species should be selected for screening and deciduous and grass-like plant species should not be used for screening purposes.
8. Be aware of necessary sight distance lines for passing traffic and safety issues. At crosswalks and driveway entrances, keep plant material below eighteen inches in height for pedestrian visibility.

Blue Butterfly Habitat Enhancement

The El Segundo Blue Butterfly is an endangered species and it's primary food source, *Erigeron parvifolium* (Sea Cliff Buckwheat), is encouraged in sheltered and less traveled areas to provide additional habitat in the Downtown. Buckwheat is a perennial and should be placed in the background or center of planter areas and intermixed with other evergreen and non-invasive native shrubs. Buckwheat prefers full sun and low water and tolerates a range of soil conditions. Buckwheat should not be pruned until the butterflies have emerged in the summer.



5

Infrastructure and Public Facilities



CHAPTER 5: INFRASTRUCTURE AND PUBLIC FACILITIES

A. Introduction

Infrastructure and public facilities are essential to the success of the El Segundo Downtown Specific Plan. This section describes existing and proposed infrastructure such as water, wastewater, storm drainage, and dry utilities and the public facilities which support the Specific Plan area.



City Hall Complex on Main Street

B. Infrastructure

1. Water Supply

The Specific Plan area is serviced by both potable and non-potable water (see Figure 5.1, Water Supply Map). Potable water is drinking water that comes from surface water and groundwater sources and is treated to levels that meet state and federal standards for consumption. Non-potable water (recycled water) is not suitable for public consumption as it does not meet drinking water standards. Non-potable water is typically used for landscape irrigation.

Potable Water

The Specific Plan area is serviced by two pressure zones: the low-pressure zone and high-pressure zone. The low-pressure zone obtains supply from the high-pressure zone through a series of valves operated by a 200,000 gallon above-ground reservoir. The southerly portion of the Specific Plan area is serviced by the High Pressure Zone, which is a closed zone system, and obtains imported water from Metropolitan Water District (MWD).

The City has a 2020 Urban Water Management Plan (prepared by Risk Management Professionals) and the 2005 Water Master Plan (prepared by AKM Consulting Engineers). Both plans are used by the Public Works Department for operations and maintenance of the distribution system and water storage facilities as well as development of capital improvement projects.

The City has a 'closed system' for potable water supply. The north-south trending alleys within the Specific Plan study area contain six and eight inch diameter potable water mains. Services can be connected to these mains to serve the existing development. Main and Richmond Streets do not contain water mains. There is a water main within Grand Avenue, Pine Avenue, and Mariposa Avenue.

Fire water is served through the hydrants located throughout the project area. Hydrants are located on each major street in the study area. There is adequate fire flow within the potable water system to serve occupancy loads now and in the future.

The adopted Five-Year Capital Improvement Program identifies city-wide projects funded by the City's Water Fund which includes a water main replacement on Grand Avenue. Annual, typical water main maintenance, valve replacement projects, and general water maintenance projects are done annually as needed for the system.

Non-Potable Water

The City is the purveyor of non-potable water supply (recycled water). In general, the West Basin Municipal Water District (WBMWD) is a wholesaler of both potable and recycled water. WBMWD owns and operates a disinfected tertiary water system that is maintained under a contract (or third-party contractor) through West Basin. WBMWD sells recycled water at a specific rate to the City, and the City bills and sells the water through their own rate structure program.

The WBMWD constructed a secondary effluent force main project, which contains several pipelines, in the early 1990s. Beneath Grand Avenue, three separate pipelines convey brine through an eighteen inch diameter pipe, secondary effluent through a sixty (60) inch diameter pipe, and recycled water through a twenty inch diameter pipe. Beneath Mariposa Avenue between Eucalyptus Drive and Virginia Street a six inch diameter recycled water pipe is present.

The adopted Five-Year Capital Improvement program does not identify proposed recycled water improvements in the Specific Plan area. However, should the City amend the agreement or collaborate with WBMWD for future needs, the recycled water systems are a feasible candidate for use in landscape areas and not rely on potable water for irrigation.

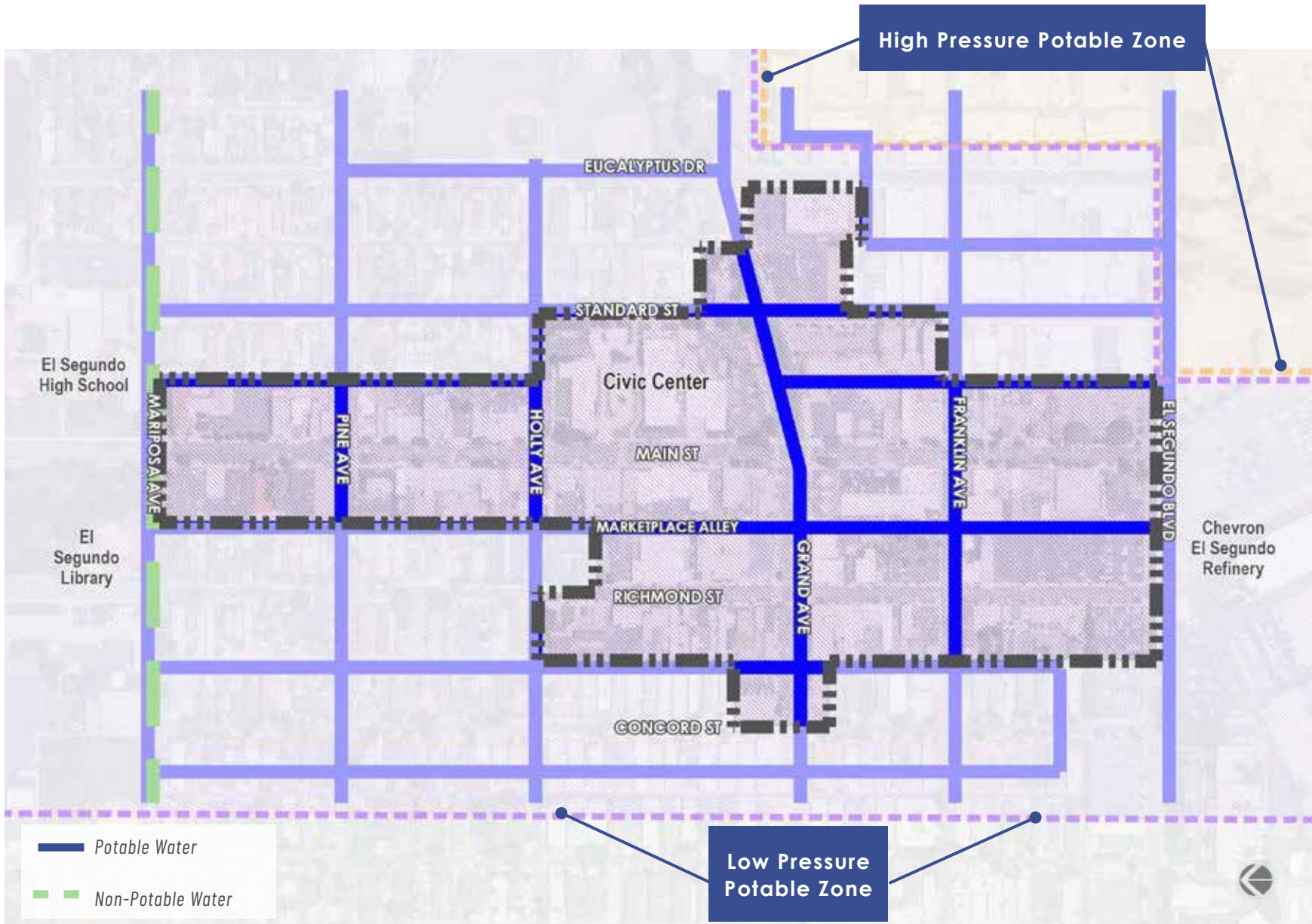


Figure 5.1 Water Supply Map

2. Wastewater Services

The Specific Plan area is serviced by typical, subsurface sanitary sewer pipelines for handling wastewater services. The sewer mains are owned by the City of El Segundo, and the Public Works Wastewater Division provides routine maintenance in compliance with the Sanitary Sewer Master Plan.

Within the study area there are eight, ten, and twelve inch diameter mains (the twelve inch is primarily beneath Standard Street and Grand Avenue) within the Specific Plan area's public streets and alleys except for the 300 through 400 blocks of Main Street, 100 to 200 blocks of Grand Avenue, and 100 through 200 blocks of Richmond Street. These blocks are serviced by mains located within the alleys. Ultimately, sewage is treated by the Hyperion Wastewater Treatment Facility owned and operated by the City of Los Angeles located west of the Los Angeles International Airport.

A solid and complete maintenance program is integral to the success of the longevity and performance of the sewer, especially in the study area where grease from dining establishments can cause additional distress on the sewer. The maintenance program should be implemented and monitored along with capital improvement projects for upgrades.

The adopted Five-Year Capital Improvement Program identifies city-wide projects funded by the City's Wastewater Fund. No specific improvements are identified within the Specific Plan area, however, there is an annual programmed budget for general wastewater infrastructure replacements.

3. Stormwater Management

The Specific Plan area is unique and has some drainage challenges locally due to the variances in surface elevations. In general, the majority of the drainage is sheet-flow type conditions within the roadway and alley network. In addition, the Specific Plan area is located within Flood Zone Z-Area of minimal flood hazards and not affected by a 500-year event.

The adopted Five-Year Capital Improvement Program identifies city-wide projects which include annual funding programmed towards unidentified infiltration projects. There are plans for low impact development (LID) improvements within the City Hall Plaza.

4. Dry Utilities

The Specific Plan area contains dry utilities, such as telephone, TV, internet, electric, and natural gas that service the community. The City of El Segundo assesses a Utility Users Tax (UUT) on commercial properties that fund telecommunications, electrical, and gas services. The City partners with Avenue Insights and Analytics for UUT support at no expense.

Telecommunications-Cable and Internet Service

AT&T and Spectrum provide telecommunications, cable, and internet services in the Specific Plan area. These carriers are expected to meet current and future demands of land uses.

Electricity Service

Southern California Edison (SoCal Edison) provides electricity service in the Specific Plan Area. Existing transmission and distribution are adequate to meet and the current and future demands of the proposed land uses. The Public Utilities Commission of the State of California outlines the regulations for SoCal Edison.

Chapter 3 of Title 11-Public Utilities in the El Segundo Municipal Code outlines provisions for underground districts. Both Title 14-Subdivision Regulations and Title 15-Zoning Regulations do not contain specific codified criteria for undergrounding a specific project, nor does the City have an undergrounding policy at the preparation of this Specific Plan for development projects. Although City staff may require a project to underground utilities as a condition of approval. However, the City Council, by Resolution, may adopt an underground district. Currently, the project area does not have an underground district but may in the future should City Council deem it necessary.

Natural Gas

The Southern California Gas Company (SoCal Gas) provides gas service to the Project Area. SoCal Gas has confirmed that there are facilities in the area and service would be provided in accordance with SoCal Gas' policies and extension rules on file with the California Public Utilities Commission at the time contractual arrangements are made on a project-by-project basis.

C. Public Facilities

1. Police and Fire Protection Services

The Civic Center Complex is located along the east side of Main Street between Holly Street on the north, Grand Avenue on the south, and Standard Street on the east. The complex contains El Segundo City Hall, the Police Department and Fire Department Station No. 1 which are all within the Specific Plan area. City Hall is located at 350 Main Street within the study area and adjacent to Downtown commercial and retail areas.

The El Segundo Police Department is located at 348 Main Street and is responsible for providing general law enforcement to the City and enforcing the local, state, and federal laws. The police department can accommodate a total of 82 sworn and non-sworn officers and related equipment. The station is adequate to accommodate a projected city-wide build out population of approximately 17,300 residents. The department utilizes an Area Command Program for quality-of-life issues within the City.

The Emergency Operations Center (EOC) is located at 348 Main Street within the Police Department facility and is the hub for ensuring that the public are informed, prepared and have the ability to recover from natural, technological, and/or acts of terrorism. Some of these hazards include fires, flooding, earthquakes, Tsunamis, hazardous waste and pipeline spills and/or leaks, and general acts of terrorism.

Because the EOC is critical to public safety and is the focal point for coordinating the City's emergency planning, training, response, and recovery efforts, the city utilizes an Emergency Management Team comprised of key agency staff specifically trained to handle emergencies. This typically includes those from various city departments, including those from police and fire. The EOC is also used as a training facility for conducting regular employee training to handle emergency preparedness, response, and recovery operations.

Fire Station No. 1 is located at 314 Main Street adjacent to the Civic Center Complex and will serve the Specific Plan area with fire, rescue, emergency, and medical services.

2. Schools, Parks, and Other Public Services

Schools

The El Segundo Unified School District offices are located outside the Specific Plan area at 641 Sheldon Street. The District provides elementary, middle, and high school education services to approximately 3,448 students citywide. There are two existing schools situated just north of the Specific Plan boundary: El Segundo High School, located at 640 Main Street, and Richmond Street Elementary School, located at 615 Richmond Street. El Segundo High School serves approximately 1,270 students in grades 9 to 12. Richmond Street Elementary School serves approximately 588 students in kindergarten to grade 5.

Parks and Recreation

The City's Community Services Department, or Recreation and Parks, is located at 401 Sheldon Street which is outside the Specific Plan area. Although Recreation and Parks are a part of the City's core service, the actual staff is not located directly at City Hall. The Department contains three divisions: Administration, Recreation, and Library. The Community Services Department operates and maintains parks and recreational facilities, the library, social programs, classes, special events and activities such as the El Segundo Certified Farmers' Market. Transportation opportunities, such as Dial-A-Ride and the Beach Shuttle are also administered by the Department.

The Specific Plan area does not contain any parks, but there are two public parks located directly adjacent to the boundary and service the area: Library Park and Recreation Park. Library Park is a passive park located adjacent to the public library north of the Project Area on Main Street at Mariposa Avenue and it contains a bandstand and shaded seating areas. Recreation Park is an active sports park located on east of the Specific Plan area on Grand Avenue at Eucalyptus Drive, and it contains baseball fields and batting cages, pickleball courts, inline hockey rink, lawn bowling, horseshoe pit, shuffleboard, playground, clubhouse, and a senior citizen center.

Library

The El Segundo Public Library is located at 111 W. Mariposa Avenue, just north of the Specific Plan boundary. As with most public libraries, there is a Library Board of Trustees, a couple of advisory committees and a non-profit referred to as Friends of The Library. The library hosts multiple community events throughout the year and provides public meeting rooms. The library offers a variety of services including a summer reading program and homework assistance programs.

Solid Waste Collection and Disposal

Several private haulers provide solid waste collection service within the Specific Plan area and EDCO serves the residential component.

As of January 1, 2022, State Law (SB 1383) went into effect requiring local collection agencies to reduce organic waste methane emissions which result from organic waste deposited at landfills. This organic waste includes food waste, green waste, and paper products that decompose and release methane gas into the atmosphere.

This bill requires a seventy-five percent reduction by 2025 city wide. As such, this waste is required to be deposited in the green containers in lieu of the gray containers. Although the landfill capacity is adequate to handle build out, this reduction will then effectively reduce the waste that gets deposited into the landfill as a secondary outcome from the law and ordinance. It was determined that the proposed project area will not require any physical changes or new/altered facilities to ensure adequate service to the project area, as detailed further in the Environmental Documentation. However, the City through development projects or within public lots may consider the implementation of trash compactors.



6

Implementation



CHAPTER 6: IMPLEMENTATION

A. Introduction

This section outlines the implementation program for the Specific Plan. The implementation program includes the following components:

- An overview of the ways the Specific Plan can attract economic investment and public improvements;
- A review of key existing economic conditions influencing current and future development potentials in the Specific Plan area;
- A summary of the types of new development that are likely to be successful in the Specific Plan area;
- A description of various economic development “tools” or implementation approaches available to the City of El Segundo to achieve the Plan objectives; and
- A review of potential funding sources/mechanisms for implementation of key Plan initiatives.

Note that within this section there are a range of strategies and funding approaches that are universally applicable to many different communities. The way in which they are ultimately adapted to El Segundo will be somewhat unique, however, which will depend on numerous specific conditions including for example available resources, the interrelationship of various programs, preferences of the applicable stakeholder groups, and other considerations.



The Specific Plan outlines programs to attract economic investment and public improvements

1. How the Specific Plan Can Attract Private Investment and Provide Public Benefits

An effective Specific Plan typically involves both the public and private sectors. Whereas development of the land uses envisioned for a plan area is often “kick started” by various public sector initiatives, the ultimate goal of this type of planning effort is to attract desired private investment. Broadly speaking, there are two major ways that a municipality can facilitate private development:

- A. By creating a “conducive development environment” that is consistent with prevailing market demand for various land uses. This may include the following types of actions or policies:
 - Zoning, design guidelines, etc. that are responsive to market needs at the individual-establishment level, while maintaining the overall character of the Specific Plan area that preserves and enhances its general marketability;
 - Information about the concepts, intent, etc. of the Specific Plan area to prospective investors/tenants;
 - Streamlined permitting and entitlement processes (i.e., minimizing the need for discretionary approval processes, environmental impact analysis, etc.);
 - Area-wide infrastructure investments, including parking facilities and street improvements;
 - Area-wide “amenity” investments, including landscape and streetscape improvements;
 - Marketing programs to enhance the area’s identity and recognition among consumers; and
 - Clearinghouse roles (e.g., coordination of funding resources and dissemination of information related to investment in the Specific Plan area).

- B. By providing focused development support to area businesses, property owners, and key development projects. This can involve the following types of initiatives:
 - Financially structuring shared infrastructure improvements that increase the productivity of the area, in ways that are advantageous to development, such as shared parking; and
 - Investing in specific infrastructure improvements in the Specific Plan area.

Each of these potential implementation items is described in greater detail below (under Section B.4, Creating the Conditions for Attracting Private Investment, and Section C, Potential Funding Sources).

2. Economic Conditions Influencing Development Potentials in the Specific Plan Area

An effective Specific Plan needs to be based on a realistic understanding of the market conditions affecting the Specific Plan area. Simply changing zoning on a map will not attract development unless there is an underlying market demand for a particular land use. On the other hand, if there is immediate demand for a desirable land use that is not permitted under existing zoning, a change in zoning can bring about very significant results. Moreover, appropriate zoning changes can be made more effective if coupled with policies that address other existing barriers to development (e.g., insufficient infrastructure). A summary of the major favorable and challenging conditions affecting development potentials in the Specific Plan area is provided below.

Advantageous Factors. El Segundo in general and the Specific Plan area overall are advantaged by the following geographic and socioeconomic factors:

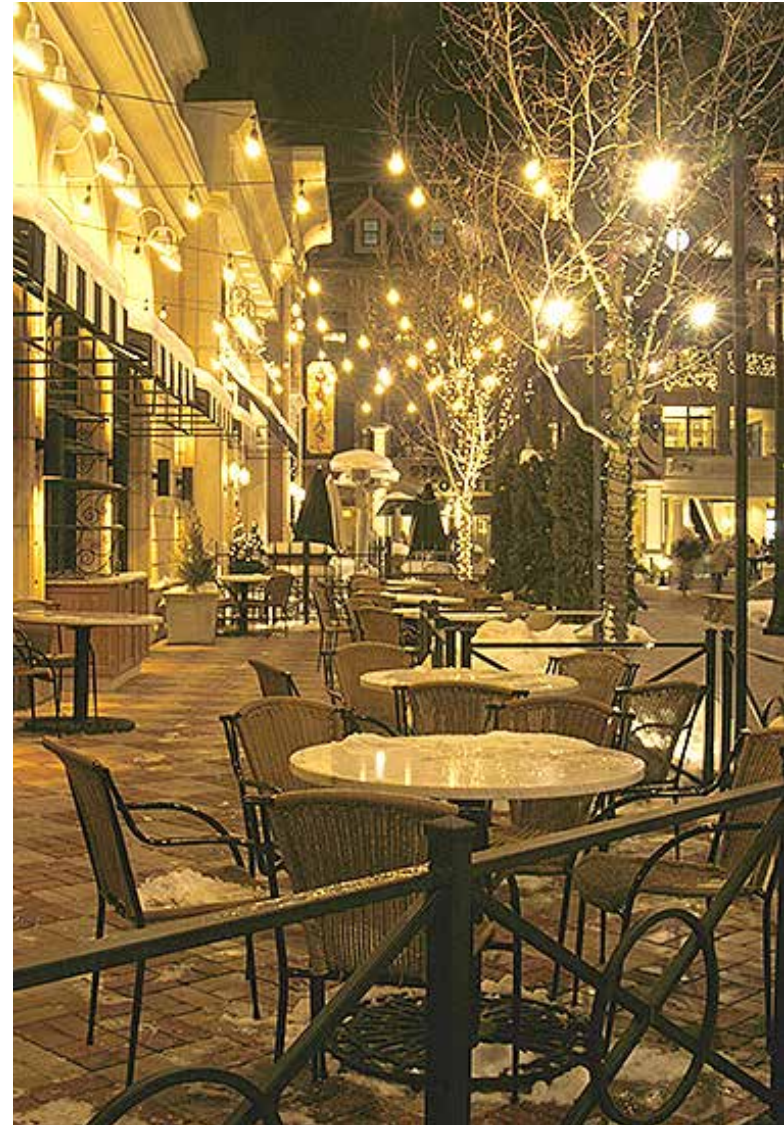
- Retail and office demand in El Segundo reflect the city's unique status as a small residential community with a massive daytime employment population. Whereas the city's resident population in 2019 was approximately 16,800 persons, in 2019 there were an estimated 73,800 jobs in the city. These numbers equate to approximately 4.4 jobs per resident. In contrast, the jobs-per-resident ratios in the neighboring cities of Culver City, Hermosa Beach, and Manhattan Beach were 1.9, 0.4 and 0.6, respectively (and the overall average for Los Angeles County was 0.5).
- Due to El Segundo's extraordinary jobs/resident ratio, the city supports far greater retail sales and has far more office space than would be typical for a residential community of its size. Taxable sales in El Segundo in 2019 were \$36,500 per resident compared to the countywide average of \$12,000. Among the three comparison cities considered in this study, only Culver City had higher taxable sales per capita (\$39,900); per capita taxable sales in Hermosa Beach and Manhattan Beach in 2019 were \$12,200 and \$19,200, respectively.
- El Segundo has an existing inventory of 17.8 million square feet of office space, representing nearly 5% of all office space in Los Angeles County. In contrast, the city's population represents only 0.2% of the Los Angeles County total, which again underscores El Segundo's very strong market position for non-residential development. A key implication of this strong market position is that future retail and office development opportunities in El Segundo will not specifically be constrained by resident population growth (which is expected to be minimal, according to the official SCAG forecast), but will be more broadly supported by regional population increases and growth in the larger Westside/South Bay economy.

Challenging Factors. The city and Specific Plan area also face several notable challenges:

- After gradually recovering from high-vacancy conditions during the Great Recession, the Los Angeles County office market has experienced significant new headwinds due to the COVID-19 pandemic. Countywide, these impacts have translated to lowered transaction volume, rising vacancy levels and slower rent growth (all of which discourage development of new space).
- The impact of the pandemic shutdown on the office market continues to take shape, and the extent to which reduced demand for office space will become a permanent condition (due to an increase in remote workers) is currently unclear. For planning purposes, the office market demand analysis summarized below assumes a gradual return to “normal” conditions of projected employment growth translating to demand for new office space. However, a more permanent “Work from Home” (WFH) workforce would clearly reduce the demand for new office space.
- Future housing demand in El Segundo (under the baseline and the aggressive scenarios considered in this analysis) is expected to be in the range of 500-750 units citywide over the next 20 years, representing growth of approximately 25-38 units per year. These projected levels of development would exceed recent historic growth rates (about 14 years per year between 2010 and 2020). In order to achieve these accelerated levels of development, the City will need to expand zoning capacity for higher-density housing. In this regard, the likely constraints (from a community acceptance perspective) on significantly increasing development densities (building heights) within the Specific Plan area place practical limits on the amounts of new residential that is likely to be built in the Downtown over the next 20 years.
- Competing downtown areas, such as Manhattan Beach’s, are currently higher-profile destinations for such activities as dining and nightlife, with established market positions.
- Although the city’s massive daytime population of high-wage workers creates significant demand for retail and restaurant businesses, most of this demand is currently satisfied by commercial areas outside the Downtown (i.e., closer to where major office districts are located).
- The Specific Plan area is largely built out and most parcels are developed with existing, economically viable uses. This typically creates a situation where any new development would need to be relatively high density in order for the ultimate value of the development to justify the costs associated with buying and clearing land that is currently occupied with financially productive uses. While there may be some currently underutilized sites that are exceptions to this observation, it probably applies as a good rule thumb for defining the types of opportunities that are likely to exist for most parcels.
- In areas where high land values challenge the financial feasibility of redevelopment (or new development), the cost of providing adequate parking is often a “deal breaker” for infill development or redevelopment, especially if structured parking is required.

The above conditions suggest the following major conclusions about the types of opportunities that are likely to apply to existing or future development in the Specific Plan area:

- For sites suitable for major new mixed-use development, projects will likely need to be relatively high density given prevailing land values.
- Parking solutions for mixed-use (and for targeted new commercial tenants such as restaurants) need to be as creative as possible, and these concepts are addressed elsewhere in the Specific Plan.
- The area could benefit from an expanded branding/marketing effort to achieve greater place recognition and effective leveraging of the area's locational strengths (as noted above under "advantageous factors").
- The preceding points all suggest that the City is well served by a flexible approach that anticipates the above issues and is responsive to the accompanying needs and market demands.



Mixed-Use development will likely need to be relatively high density

3. Summary of Development Demand Analysis

As part of the background research for the Specific Plan update, The Natelson Dale Group, Inc. (TNDG) prepared a market study to identify long-range demand for various types of development in the Specific Plan area. Key findings from the overall demand analysis are summarized in the table below for El Segundo and the Downtown Specific Plan area. The Specific Plan has evaluated these potential land uses to create a more realistic analysis which is being evaluated by the EIR and falls within the baseline and aggressive demand for the Downtown Specific Plan area.

Table 6-1: Overview of Market Demand Projections (through 2040)

Land Use	Current Existing (2023)		Citywide Demand (through 2040)		Downtown Specific Plan Demand (through 2040)		Basis/ Key Assumptions for Demand Scenarios	
	Citywide	Downtown	Baseline	Aggressive	Baseline	Aggressive	Baseline	Aggressive
Retail/Restaurant (square feet)	1,242,000	289,000	465,000	1,045,000	69,500	166,500	El Segundo's percentage share of regional (5-mile trade area) demand will remain constant	El Segundo's percentage share of regional demand will grow over time
General Office (square feet)	9,448,000	87,000	770,000	2,500,000	115,500	250,000	Baseline forecasts reflect modest employment growth projected by SCAG	Aggressive forecasts reflect a continuation of El Segundo's office absorption rates over past 10 years
Medical Office (square feet)	Included in General Office	Included in General Office	160,000	160,000	24,000	24,000	Medical office demand is assumed to be the same for baseline and aggressive scenarios (since it is assumed to be primarily a resident-serving land use, with limited potentials to capture regional demand)	
Multi-Family Residential (dwelling units)	6,678	17	500	750	200	375	Citywide forecast generally corresponds to City's RHNA requirements	Baseline projections increased by 50% to reflect potential expansion in zoning capacity

Source: The Natelson Dale Group, Inc. (TNDG) and the City of El Segundo

4. Creating the Conditions for Attracting Private Investment – City’s Role and Tools

Zoning. From an economic perspective, two key issues need to be addressed as it relates to zoning within the Specific Plan area:

1. Allowable densities need to be high enough to facilitate market-driven redevelopment of selected parcels given the relatively high land values in the Specific Plan area.
2. Zoning should allow the flexibility to develop desirable land uses for which the future market is uncertain (e.g., office space).

Streamlined permitting and entitlement. A key advantage to adopting a Specific Plan is that it provides a vehicle for expedited approval of development proposals that are consistent with the community vision established by the Plan. Developers consistently cite this type of provision as a key factor in selecting the communities where they will pursue projects. In this regard, it is essential that the adopted plan remove to the maximum degree possible the need for discretionary approvals for projects that fall within the development “envelope” established by the Plan. The program-level environmental impact report (EIR) being prepared as part of this Specific Plan process will provide a significant incentive in this regard.

Management of entitlements. The structure of the Specific Plan helps maximize attractiveness of the area for development and other investment by aligning development potential and desired development with “given” entitlements, thereby minimizing the need for property owners/developers to seek additional entitlements. At the same time, the Plan provides the regulatory framework and design guidelines to create unique and identifiable districts within the Specific Plan area. Setting clear development frameworks and minimizing the need for additional entitlements also gives the area a marketing advantage. Any future adjustments to entitlement conditions can adhere to the spirit of keeping the development process as streamlined as possible.

Another aspect of managing entitlements is the matter of having a “finite allotment of the entitlements,” available for Specific Plan area properties, which would accomplish three things: 1) Recognize practical limits in the demand for different land uses in the area, 2) Keep the development at a manageable level and type mix, and 3) Incentivize early (timely) redevelopment of individual sites. This concept may seem counterproductive with respect to the discussion above about the desirability of maximizing entitlements in the area. However, the two notions can be complementary, as development timing is the critical factor.

Tools to encourage rehabilitation and creative reuse of commercial properties. For appropriate properties, the City could have programs in place to encourage rehabilitation and creative use/reuse of commercial sites, such as dedicated grant/loan programs using CDBG or other funds. Within the study area, existing commercial uses are frequently found located in small individual properties and/or spaces that may be somewhat inefficient in terms of their relationship to the street and to parking, and their overall adaptability to various uses. However, these kinds of conditions also lend the area a character that is somewhat unique within the overall trade area. These spaces can be attractive to creative entrepreneurs in all fields of endeavor.

Marketing partnerships. The City could implement the marketing options discussed below, and other branding and information-compilation activities, in careful coordination with the El Segundo Chamber of Commerce, and any other appropriate development partners.

Branding. As a starting point for future marketing initiatives for the Specific Plan area, the City could conduct a branding exercise or similar process by which to designate the Specific Plan area with a marketing-friendly name.

Marketing and other information-compilation options. The City could undertake, or support through partnership with appropriate entities, any or all of the following options:

- Develop materials for and/or conduct workshops around the theme of, “why developing/occupying the Specific Plan area is good business.” Companion materials for living in the area could also be produced. Topics within these materials include: descriptions of how the area is value-planned, general and specific ways in which the City functions as a key partner in developing the area, benefits potentially available to developers, businesses, etc. from sources in addition to the City, and advantages to various uses from a market point of view.
- Produce a high-quality newsletter devoted to the area, issued on a regular schedule, that contains information of interest to both the property owners, businesses, and residents, and to outsiders, including people who are not familiar with the area and may have an interest in investing in it.
- Produce an annual report of development activity in the area, including development-related data such as absorption, occupancy, mix of business types, noteworthy development news, etc. The content and format of such a report can be modeled on those produced periodically by real estate brokerage firms. This kind of information could also serve as one focus of compiling monitoring/evaluation information.

Marketing of the Specific Plan area could be accomplished in recognition of the fact that Generation Y (Millennials) apparent preferences for higher density development will work in the area’s favor. (While these preferences have been noted under current conditions, other investigations of Millennials have demonstrated that such preferences might not be long-term.)

Coordination with other organizations. Given the many options for coordinating marketing and related activities supporting implementation, the City could review its overall position relative to economic development planning and marketing in order for this action to be optimized.

Role of SCAG with respect to El Segundo. As a member of the Southern California Association of Governments (SCAG), the City has access to the following benefits outlined on the SCAG website:

- Assisting in locating and securing grant funding from federal and state agencies
- Providing methodologies, tools and training programs to help members implement approved regional plans
- Receiving priority responses on requests for data, publication or other planning support
- Requesting the creation of customized maps for use on the City's website
- Access jurisdictional data analyses, forecasting data and additional GIS resources.

Currently, SCAG provides links to the City's main website as well as a 'Local Profile' for El Segundo, which is dated May of 2019. The document provides an overview of demographic, employment, housing, transportation, retail sales, education, and other regional highlights.

B. Implementation Action Plan

The vision and principles presented in the Downtown Specific Plan are supported by the following Implementation Action Plan. The Implementation Action Plan provides a summary of Specific Plan recommendations and major actions needed for implementation. The table also identifies the responsible agency or party, suggested timing of the actions, and a list of potential funding sources to assist in implementing each action to achieve the goals set forth within the El Segundo Downtown Specific Plan.



The Implementation Action Plan provides a summary of the recommendations and major actions needed to develop the vision for Downtown El Segundo

Table 6-2: Implementation Action Plan

	1 = First Year, 2= Two to Five Years, 3 = Five Years 4 = Ten Years	CD = Community Development, CE = Code Enforcement, Chamber = Chamber of Commerce, Con = Consultant, EDC = Economic Dev. Corporation, F = Finance Department, PW= Public Works, R= Recreation & Parks	
	TIMING	RESPONSIBILITY	POTENTIAL FUNDING SOURCES
REGULATORY ACTIONS			
Adoption of Specific Plan and EIR: Adoption of the Specific Plan and EIR is the catalyst for Downtown El Segundo and the recommended land uses, development standards, and other proactive policies designed to spur economic investment and visual enhancement of the area.	1	CD, Con	General Plan Maintenance Fund
PROGRAMS, STUDIES, AND INITIATIVES			
Branding and Marketing: Brand and market the Downtown to promote image and attract investment	1	CD, Chamber, EDC	Assessment District (e.g., PBID), General Fund
Gateway and Wayfinding Program: Prepare a wayfinding directional sign program including directional kiosks for the Downtown Specific Plan area. As part of the plan, include historic resources.	1	CD, PW	Assessment District (e.g., PBID), General Fund, CIP
Civic Center Public Plaza Concept (Chapter 2, Section G.4): Prepare conceptual design package for the public plaza.	1	CD	Assessment District (e.g., PBID), General Fund, CIP
Downtown Shuttle Service: Provide shuttle service to local hotels and employers to improve access to Downtown.	1	CD, Chamber, EDC	Assessment District (e.g. PBID), General Fund, User Fees, Grants

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Table 6-2: Implementation Action Plan (Continued)

	1 = First Year, 2= Two to Five Years, 3 = Five Years 4 = Ten Years	CD = Community Development, CE = Code Enforcement, Chamber = Chamber of Commerce, Con = Consultant, EDC = Economic Dev. Corporation, F = Finance Department, PW= Public Works, R= Recreation & Parks	
	TIMING	RESPONSIBILITY	POTENTIAL FUNDING SOURCES
Parking Management Plan: Review recommended parking strategies for the Specific Plan Area and determine appropriate on- and off-street parking strategies for implementation. Evaluate effectiveness existing shared parking and in-lieu fee program and update.	1	CD, PW	General Fund
Parklets Program: Prepare a Parklets Program for the long-term buildout of parklets and include the development of design criteria for parklets which identifies solutions for providing cohesive design options for parklets that comply with the operational needs of the City and meet applicable building and fire codes.	1	CD, Chamber	General Fund
Truck Route Study: Prepare a Truck Route Study to investigate the purpose and use of the existing Truck Route on Main Street. Depending on the findings of the existing conditions analysis of that study, should relocation of the Truck Route be a desired next step of analysis, the study should investigate the feasibility of that relocation.	1	CD, PW	General Fund

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Table 6-2: Implementation Action Plan (Continued)

	1 = First Year, 2= Two to Five Years, 3 = Five Years 4 = Ten Years	CD = Community Development, CE = Code Enforcement, Chamber = Chamber of Commerce, Con = Consultant, EDC = Economic Dev. Corporation, F = Finance Department, PW= Public Works, R= Recreation & Parks	
	TIMING	RESPONSIBILITY	POTENTIAL FUNDING SOURCES
Traffic Impact Study for Main Street Closure: Perform a traffic impact study to analyze the potential future long-term permanent closure of Main Street to vehicles from El Segundo Blvd to Mariposa Avenue.	1	CD, PW	General Fund
Business Impact Study for Main Street Closure: Perform a business impact study to analyze the potential future long-term permanent closure of Main Street to vehicles from El Segundo Blvd to Mariposa Avenue.	1	CD, PW	General Fund
PBID: Consider the evaluation of a Property Owner / Business Improvement District	1	CD, F	General Fund
Property/Business Owner Outreach: Establish ongoing interface with property and business owners to facilitate business retention/expansion and to maximize support for assessment-based funding.	1	CD, Chamber, EDC	General Fund
Grant Funding: Pursue federal, state and regional funding sources for infrastructure and planning.	1	CD, F	General Fund
Impact Fees: Update the Development Impact Fee (DIF) and Parking In-Lieu Fee schedules for the Specific Plan area.	1	CD, F	General Fund
Incentives: Define targeted incentives for housing, retail/restaurant, and mixed-use development (throughout Downtown with special focus on key "catalyst" sites).	1	CD, F	General Fund, Development Standards, Development Agreements

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Table 6-2: Implementation Action Plan (Continued)

	1 = First Year, 2= Two to Five Years, 3 = Five Years 4 = Ten Years	CD = Community Development, CE = Code Enforcement, Chamber = Chamber of Commerce, Con = Consultant, EDC = Economic Dev. Corporation, F = Finance Department, PW= Public Works, R= Recreation & Parks	
	TIMING	RESPONSIBILITY	POTENTIAL FUNDING SOURCES
Special Events: Program events to establish Downtown as the "cultural heart" of El Segundo; focus on attracting daytime office users to Downtown.	2	CD, Chamber, EDC	Assessment District (e.g. PBID), General Fund, User Fees
Temporary Main Street Closures: Plan for and conduct occasional/periodic street closures along Main Street between El Segundo Blvd and Mariposa Avenue for events or other activities .	2	CD, Chamber, EDC	Assessment District (e.g. PBID), General Fund, User Fees
Tenant Recruitment: Focus marketing outreach on recruitment of unique restaurants and small-scale retail in Downtown.	2	CD, Chamber, EDC	Assessment District (e.g. PBID), General Fund
IMPROVEMENT PROJECTS			
Gateway Monuments and Additional Wayfinding (Chapter 4, Section B): Survey, design development, and improvement plans as coordinated with adjoining private development.	1	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID)
Main Street Improvements (Chapter 3, Section E.1): Survey, design development, and improvement plans as coordinated with adjoining private development.	2	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants, CEQA Mitigations

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Table 6-2: Implementation Action Plan (Continued)

	1 = First Year, 2= Two to Five Years, 3 = Five Years 4 = Ten Years	CD = Community Development, CE = Code Enforcement, Chamber = Chamber of Commerce, Con = Consultant, EDC = Economic Dev. Corporation, F = Finance Department, PW= Public Works, R= Recreation & Parks	
	TIMING	RESPONSIBILITY	POTENTIAL FUNDING SOURCES
Grand Avenue Improvements (Chapter 3, Section E.2): Survey, design development, and improvement plans as coordinated with adjoining private development.	2	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants, CEQA Mitigations
Richmond Street Improvements (Chapter 3, Section E.3): Survey, design development, and improvement plans as coordinated with adjoining private development.	2	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants, CEQA Mitigations
Downtown Streetscape Theme Improvements (Chapter 4, Section C): Streetscape furnishings, decorative paving, pedestrian lighting, street banners, landscaping, and irrigation improvements.	2	PW, CD, Chamber	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants
Alleyway Improvements (Chapter 3, Section F): Survey, design development, and improvement plans as coordinated with adjoining private development.	2	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants

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Table 6-2: Implementation Action Plan (Continued)			
	1 = First Year, 2= Two to Five Years, 3 = Five Years 4 = Ten Years	CD = Community Development, CE = Code Enforcement, Chamber = Chamber of Commerce, Con = Consultant, EDC = Economic Dev. Corporation, F = Finance Department, PW= Public Works, R= Recreation & Parks	
	TIMING	RESPONSIBILITY	POTENTIAL FUNDING SOURCES
Paseo Improvements (Chapter 3, Section E): Survey, design development, and improvement plans as coordinated with adjoining private development.	2	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants
Mid-Block Crosswalk Improvements and Intersection Beautification (Chapter 3, Section A.2): Survey, design development, and selected improvement plans.	2	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants
Parking Structure at Civic Center (Chapter 3, Section G.2): Survey, design development, and improvement plans as coordinated with adjoining private development.	4	PW, CD, F	Impact/In-Lieu Fees, CFD, User Fees
Parking Structure at Richmond District (Chapter 3, Section G.2): Survey, design development, and improvement plans as coordinated with adjoining private development.	3	PW, CD, F	Impact/In-Lieu Fees, CFD, User Fees
Civic Center Public Plaza Improvement (Chapter 2, Section G.4): Survey, design development, and improvement plans as coordinated with adjoining private development.	3	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants
Bus Shelter and Transit Stop Improvements (Chapter 3, Section D): Survey, design development, and selected improvement plans.	3	PW, CD	General Fund, CIP, Development Standards, Development Agreements, Assessment District (e.g., PBID), CFD, Grants

C. Potential Funding Mechanisms

A series of financing tools potentially available to the City, from federal, state, and organizational sources, and from mechanisms that the City could implement, are described below. While the ideal set of solutions and implementation and funding mechanisms to achieve the Downtown Specific Plan's goals will evolve over time, a consistent set of criteria for selecting these mechanisms is established as follows:

- *Equitable distribution of costs and benefits:* The Downtown's existing parking and infrastructure deficiencies are shared among all property owners and businesses, and are not attributable only to future development projects. As a result, funding for resolving existing deficiencies should be shared among all property owners and/or businesses in the district – except in cases where there is a clear nexus between an individual development project and needed public facilities.
- *Allow for incremental solutions:* While major, long-term infrastructure projects can occur in later phases of the Specific Plan implementation, the action plan prioritizes high-impact approaches to infrastructure improvements that can be introduced in the short term.
- *Reduce dependency on future development:* As appropriate, implementation solutions should focus on resolving existing Downtown-wide deficiencies regardless of future development activity.

It is envisioned that many future improvements planned for the Downtown area will be achieved through development by the private sector, including meeting development standards, paying existing and possible future fees, and through other funding mechanisms that could apply to all future development. Guided by the development standards and guidelines included in this Specific Plan, these development projects can each incrementally contribute to establishing a high-quality place whose value will be much greater than it would be without these coordinated efforts.

It is also incumbent on the City to pursue an array of funding sources and financing mechanisms to implement some of the larger public improvements included in this Specific Plan. These mechanisms are complex and are tied to many factors outside the control of the City of El Segundo, including market and economic cycles, State and Federal grant funding availability, State enabling legislation, etc. This precludes the ability to immediately establish a detailed timeline for building every identified improvement. Therefore, this implementation strategy focuses on identifying the range of potential mechanisms available for delivering the major improvements necessary to realize the core elements of the Specific Plan's vision. The strategy prioritizes an initial set of investments and programmatic activities that will set the stage for long-term implementation. This implementation strategy should be revisited on a regular basis to ensure that the Plan's desired outcomes are being achieved.

1. Categories of Physical Improvements and Programs Requiring Funding

Implementation of the Downtown Specific Plan requires completing a number of physical improvement projects and initiating several ongoing programs. For purposes of understanding how funding sources and tools align with these initiatives, the recommended projects and programs are grouped in three major categories:

- Regulatory actions;
- Programs, studies and initiatives; and
- Improvement projects.

2. Funding Sources and Application to Specific Plan Improvements and Programs

This section provides a menu of potential funding sources for implementing capital improvements and programmatic activities to realize the Downtown Specific Plan vision. In many cases, multiple funding sources must be combined to pay for projects. Therefore, each source’s description includes considerations for deploying the source in the specific context of Downtown El Segundo.

Although the terms “funding” and “financing” are often used interchangeably, there is an important distinction between the two terms. “Funding” typically refers to a revenue source such as a tax, fee, or grant that is used to pay for an improvement. Some funding sources, such as impact fees, are one-time payments, while others, such as assessments, are ongoing payments. “Financing” involves borrowing against future revenues by issuing bonds or other debt instruments that are paid back over time through taxes or fee payments, enabling agencies to pay for infrastructure before the revenue to cover the full cost of the infrastructure is available.

Table 6-3: Funding Source Categories and Examples

CATEGORY	EXAMPLES
City Resources	<ul style="list-style-type: none"> • General Fund • Capital Improvement Program • User Fees
Outside Grants	<ul style="list-style-type: none"> • Federal • State • Regional (e.g., Metro)
Developer Contributions	<ul style="list-style-type: none"> • Development Standards • CEQA Mitigations • Impact/In-Lieu Fees • Negotiated Agreements
District-Based Tools	<ul style="list-style-type: none"> • Assessment District (including LLD, PBID and CBD) • Community Facilities District

City Resources

General Fund: General Fund revenues include property tax, sales tax, transient occupancy tax, and other revenues that are primarily used to pay for ongoing municipal services and operations. Both the General Fund and the Capital Improvement Program are critical funding sources for the Downtown Specific Plan’s near-term physical improvements and initial programmatic investments. In the absence of new district-based funding resources, the General Fund will also need to support ongoing programs that require City staff time, such as the recommended branding/marketing effort.

Capital Improvement Program (CIP): Infrastructure projects identified in the Downtown Specific Plan—including the major capital improvement projects—are candidates for inclusion in the City’s Capital Improvement Program, which is updated annually and includes a projection of five years of future infrastructure projects.

User Fees: User fees and rates include the fees charged for the use of public infrastructure or services. It may be possible to use some portion of user fee or rate revenue toward financing the costs of new infrastructure (e.g., parking structures) and/or services (e.g., shuttle transportation or fee-based special events).

Outside Grants

Various Federal, State, and regional grant programs distribute funding for public improvements. Because grant programs are typically competitive, grant funds are an unpredictable funding source, and the City of El Segundo must remain proactive in applying for grants to implement the Downtown Specific Plan. Downtown projects focused on pedestrian and bicycle improvements may be especially competitive for grant funding since these projects contribute to achieving the goals of the regional Sustainable Communities Strategy. For example, the Southern California Association of Governments (SCAG) provides competitive grant funding under the Active Transportation Program for infrastructure improvements such as bicycle lanes and pedestrian improvements.

Developer Contributions

Development Standards: Each new development project will contribute to the Downtown Specific Plan’s implementation by meeting requirements regulating each project’s land uses, height, density, bulk, parking requirements, on-site circulation, on-site open space, street frontage improvements, and other features consistent with the overall improvement plan for Downtown. New development projects can also be required to reimburse the City for the cost of developing and administering the Downtown Specific Plan itself. These standards are adopted in the City’s zoning ordinance and must be satisfied in order for a project to be granted approval.

CEQA Mitigations: The environmental review process requires the analysis of a project’s environmental impacts and the identification of measures to reduce or eliminate these impacts. As a requirement of approval, developers may be required to undertake a number of mitigation measures, such as off-site traffic mitigation as defined by the California Environmental Quality Act (CEQA).

Impact/In-Lieu Fees: Impact and in-lieu fees are one-time fees imposed on new developments to pay for improvements and facilities that either serve the new development or reduce the impacts of the project on the community. Fee revenues cannot be used to fund existing deficiencies in infrastructure. In-lieu fees are payments made instead of meeting an on-site development requirement (such as paying a fee in-lieu of providing on-site parking spaces), while impact fees are required unless the impact is addressed in some other way (if allowed).

The cost and basis of impact fees and in-lieu fees must be directly related to the impacts being mitigated or requirement being met, respectively. As part of the initial process of implementing the Downtown Specific Plan, the City should undertake a review and update the Development Impact Fee and Parking In-lieu Fee schedules relevant to the Downtown.

Negotiated Agreements: Negotiated community benefits are developer contributions that exceed the baseline features required through development standards, environmental mitigation measures, and impact fees. These agreements are typically negotiated for large development projects, often either as a codified condition of approval for projects meeting certain conditions, or in exchange for variances from existing land use regulations. Given the scarcity of large future development sites in the Downtown, negotiated agreements are unlikely to be a major funding source; however, they may be useful and a case-by-case basis to supplement other funding sources.

District-Based Tools

Land-based financing tools are typically associated with new real estate development to generate benefit-based special assessment revenues or property tax revenues to finance improvements through bond repayment or paying for improvements over time. District-based tools provide a stable revenue stream while ensuring that properties benefiting from improvements also contribute to those public investments. The following table describes the three primary types of district-based funding and financing tools. Note that assessment districts and community facilities districts primarily capture additional funding from private entities.

The property-based improvement district (PBID) and/or business improvement district (BID) may be particularly relevant for use in the Downtown. With ongoing funding by property owners and/or business owners, a PBID or BID would provide an ongoing stream of revenue for promoting the district, contributing to lower-cost physical improvements, and managing any ongoing programs. This revenue source is generally insufficient to fund major capital improvements, but the limited assessment and the local control of revenues are likely to appeal to property owners and businesses within the district.

A Mello-Roos community facilities district (CFD) would provide a flexible and substantial revenue source against which it is possible to issue bonds for major capital improvements. Revenues can also be used to fund ongoing operation and maintenance expenses. However, passage of a CFD in the Downtown is likely to be challenging until property owners reach consensus around shared infrastructure needs and a willingness to contribute significant monetary resources toward addressing those needs.

Table 6-4: Summary of Major District-Based Value Capture Tools

FUNDING TOOL	DESCRIPTION	USES	CONSIDERATIONS
Special Assessment Districts	<p>Additional assessment against a range of participants, depending on the type of district and relative benefit received.</p> <p>Examples include: Landscaping and Lighting District, Community Benefit District, Business Improvement District, Property- Based Business Improvement District</p>	<p>Most useful for funding ongoing operations and maintenance.</p>	<ul style="list-style-type: none"> • Requires majority vote of paying stakeholders. • Increases costs and risk for paying stakeholders; stakeholders need to perceive a clear benefit for themselves. • Impacts paying stakeholders’ overall ability to support other taxes, fees, and community benefits. • Little financial risk to the City or public agencies; could lead to increased tax revenue based on private reinvestment. • Additional City staff time to administer districts could offset some gains.
Community Facilities District (Mello-Roos)	<p>Additional assessment on property, levied and varied based on a selected property characteristic (excluding property value).</p>	<p>Infrastructure improvements, development of public facilities, ongoing operations and maintenance.</p>	<ul style="list-style-type: none"> • Requires approval of 2/3 of property owners • Boundaries can include noncontiguous parcels. • Fees can be proportionally subdivided and passed on to future property owners. • Increases costs and risk for landowners and homeowners if fees dissuade buyers or reduce achievable sales prices. • Impacts paying stakeholders’ overall ability to support other taxes, fees, and community benefits.

Table 6-5: Applicable Funding Sources										
	Developer Contributions				District-Based Mechanisms		City Resources			Outside Sources
	Development Standards	CEQA Mitigations of Project Impacts	Impact / In-Lieu Fees	Negotiated & Voluntary Agreements	Assessment District (LLD, PBID, CBD)	CFD	General Fund	Capital Improvement Program Funds	User Fees	Other Regional, State and Federal Grants
REGULATORY ACTIONS										
Adoption of Specific Plan and EIR							X			X
PROGRAMS, STUDIES, AND INITIATIVES										
Branding and Marketing					X		X			
Gateway and Wayfinding Program					X		X	X		
Civic Center Public Plaza Concept					X		X	X		
Downtown Shuttle Service					X		X		X	X
Parking Management Plan							X			
Parklets Program							X			
Truck Route Study							X			
Traffic Impact Study for Main Street Closure							X			
Business Impact Study for Main Street Closure							X			
PBID (Feasibility Study)							X			

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Table 6-5: Applicable Funding Sources (Continued)

	Developer Contributions				District-Based Mechanisms		City Resources			Outside Sources
	Development Standards	CEQA Mitigations of Project Impacts	Impact / In-Lieu Fees	Negotiated & Voluntary Agreements	Assessment District (LLD, PBID, CBD)	CFD	General Fund	Capital Improvement Program Funds	User Fees	Other Regional, State and Federal Grants
Property/Business Owner Outreach							X			
Grant Funding (investigate and pursue external funding sources)							X			
Impact Fees (Updated DIF and Parking In-Lieu schedules)							X			
Define Developer Incentives	X			X			X			
Special Events					X		X		X	
Temporary Main Street Closures for Events					X		X			
Tenant Recruitment					X		X			
IMPROVEMENT PROJECTS										
Gateway Monuments and Additional Wayfinding	X			X	X		X	X		
Main Street Improvements	X	X		X	X	X	X	X		X
Grand Avenue Improvements	X	X		X	X	X	X	X		X
Richmond Street Improvements	X	X		X	X	X	X	X		X
Downtown Streetscape Theme Improvements	X			X	X	X	X	X		X

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Table 6-5: Applicable Funding Sources (Continued)

	Developer Contributions				District-Based Mechanisms		City Resources			Outside Sources
	Development Standards	CEQA Mitigations of Project Impacts	Impact / In-Lieu Fees	Negotiated & Voluntary Agreements	Assessment District (LLD, PBID, CBD)	CFD	General Fund	Capital Improvement Program Funds	User Fees	Other Regional, State and Federal Grants
Alleyway Improvements	X			X	X	X	X	X		X
Paseo Improvements	X			X	X	X	X	X		X
Mid-Block Crosswalk Improvements and Intersection Beautification	X			X	X	X	X	X		X
Parking Structure at Civic Center			X			X			X	
Parking Structure at Richmond District			X			X			X	
Civic Center Public Plaza Improvement	X			X	X	X	X	X		X
Bus Shelter and Transit Stop Improvements	X			X	X	X	X	X		X

The following table includes examples of grant funding sources that are potentially applicable to the Downtown Specific Plan Area.

Table 6-6: Examples of Grant Funding Sources

Program	Category	Agency/ Source	Description
Transportation Alternatives (TA) Funding	Federal	USDOT	Continues the Transportation Alternatives set-aside from the Surface Transportation Block Grant (STBG) program. Eligible uses of the set-aside funds include all projects and activities that were previously eligible under the Transportation Alternatives Program under the Moving Ahead for Progress in the 21st Century Act (MAP-21). This encompasses a variety of smaller-scale transportation projects such as pedestrian and bicycle facilities, recreational trails, safe routes to school projects, community improvements such as historic preservation and vegetation management, and environmental mitigation related to stormwater and habitat connectivity.
Charging and Fuel Infrastructure Grants	Federal	USDOT	Program funds will be made available each fiscal year for Community Grants, to install electric vehicle charging and alternative fuel in locations on public roads, schools, parks, and in publicly accessible parking facilities.
Active Transportation Program	State	Caltrans	The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SRTS), into a single program with a focus to make California a national leader in active transportation. The program provides a total of about \$220 million each year for bike and pedestrian projects across California. The program allows cities, counties, transit agencies and other public agencies to compete for grants to build bicycle/pedestrian paths, install bike racks and pay for other projects or programs that make walking or biking easier, safer and more convenient.
Clean California Local Grant Program	State	Caltrans	Projects that beautify and improve local streets and roads, tribal lands, parks, pathways, and transit centers to clean and enhance public spaces.

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Table 6-6: Examples of Grant Funding Sources (Continued)

Program	Category	Agency/ Source	Description
Infill Infrastructure Grant Catalytic Program	State	HCD	Funding for Capital Improvement Projects that are necessary to facilitate the development of housing. Eligible improvements include utility service improvements, streets, roads, parking structures, transit linkages, transit shelters, traffic mitigation features, site preparation or demolition, sidewalks, and streetscape improvements.
Measure M	Local/ Regional	Metro	LA County voters approved Measure M with 71.15% support in 2016. The no sunset half-cent sales tax measure funds projects to ease traffic, repair local streets and sidewalks, expand public transportation, earthquake retrofit bridges and subsidize transit fares for students, seniors and persons with disabilities.
Measure R	Local/ Regional	Metro	A two-thirds majority of LA County voters approved the Measure R half-cent sales tax in 2008 to finance new transportation projects and programs, and accelerate those already in the pipeline. The Measure R Expenditure Plan devotes its funds to seven transportation categories: 35% to new rail and bus rapid transit projects; 3% to Metrolink projects; 2% to Metro Rail system improvement projects; 20% to carpool lanes, highways and other highway related improvements; 5% to rail operations; 20% to bus operations; and 15% for Local Return programs.
Proposition C	Local/ Regional	Metro	Proposition C was approved by Los Angeles County voters in November 1990, generating with a half-cent sales tax. Proposition C was intended to support projects and programs developed with Proposition A funds and, in particular, was to provide funding to help improve and expand the rail system started with Proposition A funds. The Proposition C expenditure plan is as follows: 20% Local Return programs; 5% rail and bus security; 10% commuter rail, transit centers and park & ride; 25% transit-related highway improvements; and 40% discretionary.

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Table 6-6: Examples of Grant Funding Sources (Continued)

Program	Category	Agency/ Source	Description
Proposition A	Local/ Regional	Metro	Approved by voters in November 1980, Proposition A is a half-cent sales tax dedicated to transportation funding and was the first of its kind to address transportation challenges in LA County. Proposition A has funded transportation projects, improved bus service, initiated plans for a rail system that continues to be expanded today and helped subsidize fares. The Proposition A expenditure plan includes 3 categories: 25% to Local Return Programs, 35% to rail development and 40% to discretionary.
AB 2766 Motor Vehicle Subvention Program	Local/ Regional	AQMD	The AB 2766 Subvention Program is a funding source for cities and counties to encourage the development of measures or projects that result in the reduction of motor vehicle emissions.
Sustainable Transportation Planning Grants	Local/ Regional	SCAG/ Caltrans	Sustainable Transportation Planning Grants funds local and regional multimodal transportation and land use planning projects, transportation planning studies partnering with Caltrans, and multimodal planning studies partnering with Caltrans that further the region’s RTP SCS (where applicable), contribute to the State’s GHG reduction targets, and assist in achieving the Caltrans Mission and Grant Program Objectives.



7

Administration



CHAPTER 7: ADMINISTRATION

A. Introduction

This chapter describes the authority of the Specific Plan, the administrative procedures required for amendments and/or modifications to the Specific Plan, Specific Plan administration, and design review process.



View of the City Hall Complex at Main Street looking towards Grand Avenue

B. Authority and Adoption

California Government Code Sections 65450 through 65457 provide the necessary authorization for the City of El Segundo to prepare and adopt this Specific Plan. Hearings are required by both the Planning Commission and City Council, after which the Specific Plan can be adopted by the City Council either by resolution (as policy) or by ordinance (as regulation). This document has been adopted by ordinance by the City Council as a regulation through a public hearing process.

The Downtown Specific Plan is a regulatory plan which will serve as zoning law for properties within the boundaries of the Plan. All proposed development plans or agreements, tentative or parcel maps, and any other development approvals must be consistent with this Specific Plan and with the General Plan.

The Downtown Specific Plan supersedes other regulations and ordinances of the City for the control of land use and development within the Specific Plan boundaries. Where the Specific Plan is silent on a topic, the El Segundo Municipal Code requirements remain in effect.

C. Specific Plan Amendments

The Specific Plan may need to be revised over time to accommodate modifications in response to the community's needs or changing economic conditions. California Government Code Section 65453 states that a specific plan "may be amended as often as deemed necessary by the legislative body." Amendments to the Specific Plan may be proposed as long as the proposed amendments are compatible and consistent with the purpose and goals of the Specific Plan and the El Segundo General Plan. Specific Plan amendments shall be processed in accordance with Government Code sections 65453-65454 and ESMC Chapter 15-27.

1. Amendment Approval

Minor Amendments

The Director of Community Development may make minor text and exhibit modifications that are clerical in nature with no substantive impact/change. Development Standard adjustments and administrative determinations do not require an amendment to the Specific Plan.

Appeals

Appeals of decisions by the Director of Community Development shall be processed in accordance with Chapter 15-29 (Appeals) of the ESMC.

D. Specific Plan Administration

1. Interpretation

The Director of Community Development is assigned the responsibility and authority to interpret the Specific Plan. Whenever the Director of Community Development makes an official interpretation of this Specific Plan, the interpretation shall be made in writing explaining the interpretation and the general circumstances surrounding the need for the interpretation. Any interpretation by the Director of Community Development may be appealed. The Director of Community Development may refer interpretation of the Specific Plan to the Planning Commission for a decision at a public meeting.

2. Severability

If any section, subsection, sentence, clause, phrase or portion of this Specific Plan, or any future amendments or additions hereto, is for any reason found to be invalid or unconstitutional by the decision of any court of competent jurisdiction, such decision shall not affect the validity of the remainder of this Specific Plan document or any future amendments or additions hereto. The City hereby declares that it would have adopted these requirements and each sentence, subsection, clause, phrase or portion or any future amendments or additions thereto, irrespective of the fact that any one or more section, subsections, clauses, phrases, portions or any future amendments or additions thereto may be declared invalid or unconstitutional.

3. Administration Process

All development applications within the Specific Plan area shall follow established City procedures such as those for zone variances, conditional use permits, development permits and subdivisions. All development applications within the Specific Plan area will be evaluated for compliance with Specific Plan regulations and guidelines. Appeals are regulated pursuant to compliance with Chapter 15-29 (Appeals) of the ESMC.

4. Allowable Land Uses

Allowable land uses are identified in Chapter 2, Private Realm – Land Use and Development Standards and are listed for each Specific Plan District. A land use that is not listed in the Permitted Use Table is not allowed except where the Director of Community Development may find that a use may be permitted due to its consistency with the purpose/intent of the zoning district and similarity to other uses listed in compliance with ESMC Chapter 15-22 (Administrative Determinations). In addition, General Office, Medical-Dental Office, and other pedestrian-friendly uses may be allowed in the Main Street and Richmond Street Districts as primary street ground floor uses subject to review and approval of an Administrative Use Permit (ESMC Chapter 15-23). Such uses must increase foot traffic and/or otherwise improve the pedestrian environment and may be subject to conditions of approval requiring a retail component, outdoor displays or seating, installation of public art, etc.

5. Nonconformity

Chapter 15-21 (Nonconforming Buildings and Uses) of the ESMC shall be used for any nonconforming uses, structures or parcels within the Specific Plan area. Land uses and structures existing as of the adoption date of this Specific Plan may continue to remain in accordance with the ESMC (Chapter 15-21).

6. Administrative Determinations

Administrative Determinations must comply with Chapter 15-22 of the El Segundo Municipal Code (ESMC).

7. Development Standards Adjustments

The Director of Community Development may grant adjustments related to development and design standards, provided any administrative relief does not exceed fifteen percent of any development or design standard, or any development or design standard consistent with ESMC Chapter 15-22, whichever is greater.

8. Authority to Inspect

Inspections must comply with ESMC Chapter 15-30.

9. Penalty

Penalties must comply with ESMC Chapter 15-30.

10. Authority to Promulgate Rules and Regulations

The Director of Community Development has the authority to promulgate rules and regulations, and to amend or add to them, for the implementation of this chapter.

11. Administrative Discretionary Demolition Permits

The demolition of structures on properties identified individually as potential historic resources or contributing to a potential historic district requires review and approval of an Administrative Discretionary Demolition Permit. This permit is subject to the review process in ESMC Chapter 15-23 and the following finding:

Before an Administrative Discretionary Demolition Permit may issue, the decision making authority must find that demolition of the subject structure(s) will not cause a substantial adverse change in the significance of a historical resource.

E. Design Review Process

1. Purpose

The purpose of the design review process is to ensure that new development in the Downtown Specific Plan area complies with the standards contained in Chapter 2, Private Realm – Land Use and Development Standards of the Specific Plan.

2. Levels of Review and Process

The following levels of review apply to development projects in the Downtown Specific Plan area:

a. Ministerial

Ministerial review occurs during the building permit process. No discretionary permit and/or planning applications are required. Ministerial review is limited to ensuring compliance with objective development and design standards in Chapter 2 of this Specific Plan.

Applicability. Ministerial review applies to all projects that are not subject to Administrative or Planning Commission review and include, without limitation, the following development projects:

- Installation, replacement, or modifications to individual architectural building features, including, without limitation, windows, doors, awnings, lighting, siding material and colors, landscaping, and signs.

Review Authority. Community Development Department staff.

b. Administrative

Administrative-level review requires submittal of a Downtown Design Review (DDR) application to the Community Development Department.

Applicability. Administrative-level review applies to the following development projects:

- Substantial exterior alterations. These include installation, replacement, modifications to multiple types of architectural building features, including, without limitation, windows, doors, awnings, lighting, siding material and colors, landscaping, and signs as determined by the Director of Community Development, or his/her designee.
- Changes to the size or location of building openings, such as windows and doors.
- Outdoor retail uses and outdoor dining (including temporary dining).
- An addition to a building that is up to a maximum of eight hundred (800) square feet (gross) in size.

Review Authority. Director of Community Development, or his/her designee. The Director's decisions shall be in compliance with ESMC Chapter 15-23.



The design review process will ensure the Downtown vision is implemented

c. **Planning Commission**

Planning Commission-level review requires submittal of a Downtown Design Review (DDR) application to the Community Development Department.

Applicability. Planning Commission-level review applies to the following development projects:

- New buildings.
- An addition to a building that is over eight hundred (800) square feet (gross) in size.
- Substantial exterior alterations or other development projects referred to the Planning Commission by the Director of Community Development.

Review Authority. Planning Commission. A public hearing and notification is required before the Planning Commission issues a decision. The public hearing and notice must comply with ESMC Chapter 15-28. A decision of the Planning Commission may be appealed to the City Council pursuant to ESMC Chapter 15-29.

d. **Findings**

Administrative and Planning Commission Design Review applications must meet the following findings:

- The project design is consistent with the goals, policies, and objectives of the General Plan and the Specific Plan.
- The project design substantially complies with the development standards and guidelines in Chapter 2 of the Specific Plan.

Table 7-1: Downtown Design Review (DDR) Process

Review Level	Applicability/ Thresholds	Review Authority	Application/ Public Hearing Required	Decision Method
Ministerial	* All projects that are not subject to Administrative or Planning Commission review. These include, without limitation, the following: Installation, replacement, or modifications to individual architectural building features, including, without limitation, windows, doors, awnings, lighting, siding material and colors, landscaping, and signs.	Community Development Department staff	No separate DDR application/ No public hearing	Building Permit
Administrative	* Substantial exterior alterations. These include installation, replacement, or modifications to multiple architectural building features, including, without limitation, windows, doors, awnings, lighting, siding material and colors, landscaping, and signs as determined by the Director of Community Development, or his/ her designee. * Changes to the size or location of building openings, such as windows and doors. * Outdoor retail uses and outdoor dining (including temporary dining). * Additions to buildings up to a maximum of eight hundred (800) square feet (gross).	Director of Community Development, or his/ her designee	DDR application required/ No public hearing	Director Letter
Planning Commission	* New buildings * Additions to buildings over eight hundred (800) square feet (gross) * Substantial exterior alterations or other development projects referred to the Planning Commission by the Director of Community Development, or his/ her designee.	Planning Commission	DDR application required/ Public hearing required	Planning Commission Resolution

F. Environmental Review

A program-level Environmental Impact Report (EIR) was prepared for the Specific Plan. A Program EIR may reduce the need for project-specific environmental review in areas that have been analyzed by the EIR, subject to findings that there are no significant changes in conditions and that the project is in compliance with the Specific Plan requirements. Certain projects may require additional specific environmental review as necessary. This could include targeted studies on one or more identified environmental concerns. The City will make these determinations, and environmental review may be incorporated in the development approval process.



A

Appendix



APPENDIX A: Relationship to the General Plan

A. Introduction

The Downtown Specific Plan is consistent with its General Plan Land Use Designation. In addition, the Specific Plan directly implements or furthers the intent of the following General Plan goals, objectives, and policies.

1. Economic Development Element

Goal ED3: Downtown Business Environment. To preserve and improve the business environment and image of Downtown El Segundo.

- **Objective ED3-1:** To create an economically viable and stable Downtown area that uniquely contributes to El Segundo's commercial options.
 - **Policy ED3-1.1:** Strive to present a clear and consistent image of what the Downtown area is and how it can serve El Segundo's residential and business communities.
 - **Policy ED3-1.2:** Preserving the Downtown area's economic viability should be a priority.
 - **Policy ED3-1.3:** Encourage revitalization efforts that improve the appearance of Downtown area businesses.
 - **Policy ED3-1.4:** Augment the Downtown area's atmosphere and accessibility by addressing vehicle circulation, parking, and streetscape issues.
 - **Policy ED3-1.5:** Encourage a mix of retail and commercial businesses that stimulate pedestrian traffic and meet the communities changing needs for goods and services.

The Downtown Specific Plan is consistent with the above noted Economic Development Goal, Objectives, and Policies of the General Plan. The Plan strives to preserve and improve the business environment, stabilize the economic viability of the Downtown, improve the appearance of Downtown, improve vehicular circulation, parking and streetscape and enhance the pedestrian environment while providing the opportunity for a mix of commercial services.



The Downtown Specific Plan will provide for an economically viable and stable Downtown that uniquely contributes to El Segundo's commercial options

2. Land Use Element

Goal LU1: Maintenance of El Segundo's "Small Town" Atmosphere. Maintain El Segundo's "small town" atmosphere and provide an attractive place to live and work.

- **Objective LU1-4:** Preserve and maintain the City's Downtown and historic areas as integral to the City's appearance and function.
- **Objective LU1-5:** Recognize the City as a comprehensive whole and create policies, design standards, and monumentation that will help create a sense of place for the entire City.
 - **Policy LU 1-5.1:** Encourage active and continuous citizen participation in all phases of the planning program and activities.
 - **Policy LU1-5.2:** Adopt a comprehensive sign ordinance which will regulate the quantity, quality and location of signs.
 - **Policy LU1-5.3:** Preserve existing street trees and encourage new ones consistent with the City Street Tree Program.
 - **Policy LU1-5.4:** Adopt action programs which will provide for planting of trees in all the City streets, landscaping of median strips in major and secondary highways, improvement and beautification of parking lots, railroad rights-of-way, unsightly walls or fences and vacant lots.
 - **Policy LU1-5.5:** Develop an active program to beautify the major entrances to the City. Landscaping and an attractive monument with the City's name and other design features would heighten the City's identification.
 - **Policy LU1-5.6:** Require all projects to adhere to the processing and review requirements found in the City Zoning Ordinance and the guidelines for the implementation of the California Environmental Quality Act (CEQA).
 - **Policy LU1-5.8:** Innovative land development and design techniques as well as new materials and construction methods should be encouraged.
 - **Policy LU1-5.9:** Develop standards to address the potential impacts of drive-thru restaurants on residential uses.

The Downtown Specific Plan is consistent with the above detailed General Plan Land Use Goal, Objectives and Policies in that one of the Plan's goals is to maintain the "small town" atmosphere. The Plan also strives to complement the Downtown's historic context, create a sense of place, provide for citizen input through the public workshop and community outreach, Planning Commission and City Council public hearings, encourage street trees, landscaping, and entry statements, and provide appropriate CEQA review.

Goal LU2: Preservation and Enhancement of El Segundo's Cultural and Historic Resources. Preserve and enhance the City's cultural heritage and buildings or sites that are of cultural, historical, or architectural importance.

- **Objective LU2-1:** Maintain the distinct character of the existing areas of the City.
 - **Policy LU2-1.1:** New development adjacent to a building of cultural, historical, or architectural significance shall be designed with a consistent scale and similar use of materials.

- **Objective LU2-2:** Encourage the preservation of historical and cultural sites and monuments.
 - **Policy LU2-2.1:** Take an active role in documenting and preserving buildings of cultural, historical, and architectural significance. This should include residential, non-residential, and publicly-owned buildings.
 - **Program LU2-2.1A:** The City shall conduct a thorough survey of all buildings of cultural, historical, or architectural significance within the City.
 - **Program LU2-2.1 B:** The City shall investigate methods for preserving historical buildings, including overlay zoning districts, historical designations, and national register listings.
 - **Policy LU2-2.2:** Take an active role in assisting individual owners or groups in documenting and preserving buildings of potential cultural, historical, or architectural significance.

The Downtown Specific Plan is consistent with the Goals, Objectives and Policies which encourage preservation and enhancement of the Downtown's cultural and historical resources, in that Chapters 2 and 4 of the Specific Plan propose goals and development standards to encourage the enhancement of the potential historical buildings in this area and guide compatible new development and improvements. For example, Historic Resource requirements are specifically provided in Chapter 2.

Goal LU4: Provision of a Stable Tax Base for El Segundo through Commercial Uses. Provide a stable tax base for the City through development of new commercial uses, primarily within a mixed-use environment, without adversely affecting the viability of Downtown.

- **Objective LU4-2:** Create an integrated, complimentary, attractive multi-use Downtown to serve as the focal point for the civic, business, educational, and social environment of the community.
 - **Policy LU4-2.1:** Revitalize and upgrade commercial areas, making them a part of a viable, attractive and people oriented commercial district. Consideration should be given to aesthetic architectural improvements, zoning and shopper amenities.
 - **Policy LU4-2.2:** The City shall participate in Downtown revitalization efforts through a commitment of staff time and technical assistance.
 - **Policy LU4-2.3:** Utilize public spaces for Downtown activities and special events.
 - **Policy LU4-2.4:** The City shall commit to maintaining and upgrading where necessary the public areas Downtown.
 - **Policy LU4-2.5:** The Downtown area will provide adequate parking, through both public and private efforts, to meet demand.
 - **Program LU4-2.5A:** Develop an on-going program to analyze the peak hour parking needs of the Downtown area.
 - **Policy LU4-2.6:** The Downtown area shall maintain and encourage low-scale architectural profile and pedestrian oriented features, consistent with existing structures.
 - **Policy LU4-2.7:** Investigate development of shuttle service to provide public transportation access to Downtown, as well as future commercial areas.
 - **Policy LU4-2.8:** Limit number of “fast food” (lunchtime) restaurants in the Downtown area, to address parking concerns at peak hours.
 - **Policy LU4-2.9:** Within one year after adoption of the General Plan, the City shall initiate the development of a Downtown Traffic Mitigation Plan, designed to mitigate traffic impacts associated with development at FAR 1.0.

The Specific Plan provides the opportunity to enhance and further stabilize the existing Downtown tax base within a mixed-use environment. The Plan strives to create Downtown as the focal point of the community, enhancing the aesthetic environment and upgrading public spaces for Downtown activities. The Specific Plan addresses provisions for adequate parking, pedestrian-oriented architecture, and evaluation and mitigation of traffic impacts.

Goal LU7: Provision of Quality Infrastructure. Provide the highest quality public facilities, services and public infrastructure possible to the community.

- **Objective LU7-1:** Provide the highest and most efficient level of public services and public infrastructure financially possible.
 - **Policy LU7-1.3:** Develop, adopt, and implement a street lighting plan which provides a uniform and high quality of streetlights in all areas of the City.
- **Objective LU7-2:** Promote City appearance and cultural heritage programs.
 - **Policy LU7-2.1:** Coordinate public improvements and beautification efforts with service groups, citizen groups, and organizations who are interested in upgrading the community.
 - **Policy LU7-2.5:** All public facilities and utilities should be designed to enhance the appearance of the surrounding areas in which they are located.

The Specific Plan is consistent with the General Plan Goal, Objectives and Policies related to the provision of quality infrastructure in that improved sidewalks, streets, street lighting, and other streetscape infrastructure improvements are proposed.



The Specific Plan area will include quality sidewalks, streets, street lighting, and other streetscape infrastructure improvements

Goal C1: Provision for a Safe, Convenient and Cost Effective Circulation System. Provide a safe, convenient and cost-effective circulation system to serve the present and future circulation needs of the El Segundo community.

- **Objective C1-1:** Provide a roadway system that accommodates the City’s existing and projected land use and circulation needs.
 - **Policy C1-1.7:** Provide adequate intersection capacity to the extent possible on Major, Secondary and Collector Arterials to prevent diversion through traffic into local residential streets.
 - **Policy C1-1.8:** Provide all residential, commercial and industrial areas with efficient and safe access for emergency vehicles.
- **Objective C1-2:** Provide a circulation system consistent with current and future engineering standards to ensure the safety of the residents, workers and visitors of El Segundo.
 - **Policy C1-2.1:** Develop and maintain a circulation system which shall include a functional hierarchy and classification system of arterial highways that will correlate capacity and service function to specific road design and land use requirements.

The Specific Plan is consistent with the Circulation Element Goal, Policies, and Objectives detailed above in that the circulation system in the Downtown area is safe, convenient, and cost effective. The roadway improvement proposals for Main Street, Grand Avenue and Richmond Street have been evaluated and can accommodate the circulation needs, and the Specific Plan area will continue to provide emergency vehicle access.



The Specific Plan provides for a safe, convenient, and cost effective multimodal circulation system in the Downtown area

Goal C2: Provision for Alternative Modes of Transportation. Provide a circulation system that incorporates alternatives to the single-occupant vehicle, to create a balance among travel modes based on travel needs, costs, social values, user acceptance, and air quality considerations.

- **Objective C2-1:** Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.
 - **Policy C2-1.6:** Encourage shopping areas to design their facilities for ease of pedestrian access.
 - **Policy C2-1.7:** Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.

- **Objective C2-2:** Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.
 - **Policy C2-2.1:** Implement the recommendations on the Bicycle Master Plan contained in the Circulation Element, as the availability arises; i.e., through development, private grants, signing of shared route.
 - **Policy C2-2.2:** Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.

- **Objective C2-3:** Ensure the provision of a safe and efficient transit system that will offer the residents, workers and visitors of El Segundo a viable alternative to the automobile.
 - **Policy C2-3.1:** Work closely with the Southern California Rapid Transit District (SCRTD), the Los Angeles County Transportation Commission (LACTC), and the Rail Construction Corporation (RCC). Torrance Municipal Bus Lines, the El Segundo Employers Association (ESEA) and private businesses to expand and improve the public transit service within the adjacent to the City.
 - **Policy C2-3.2:** Ensure that transit planning is considered and integrated into all related elements of City planning.

- **Objective C2-5:** Ensure the use of Transportation Demand Management (TDM) measures throughout the City, where appropriate, to discourage the single-occupant vehicle, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.
 - **Policy C2-5.1:** Ensure that Transportation Demand Management (TDM) measures are considered during the evaluation of new developments within the City, including but not limited to ride-sharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.

One of the primary goals of the Downtown Specific Plan is to provide a pedestrian-oriented environment, which is consistent with the General Plan provisions for alternative modes of transportation. The widened and enhanced sidewalks will further enhance pedestrian activity. The Specific Plan continues to provide bicycle and transit system access, consistent with the General Plan, while encouraging more bicycle parking facilities.

Goal C3: Development of Circulation Policies that are Consistent with other City Policies. Develop a balanced General Plan, coordinating the Circulation Element with all other Elements, ensuring that the City’s decision-making and planning activities are consistent among all City departments.

- **Objective C3-1:** Ensure that potential circulation system impacts are considered when the City’s decision makers and staff are evaluating land use changes.
 - **Policy C3-1.1:** Require all new development to mitigate project-related impacts on the existing and future circulation system such that all Master Plan roadways are upgraded and maintained at acceptable levels of service through implementation of all applicable Circulation Element policies. Mitigation measures shall be provided by or paid for by the project developer.
 - **Policy C3-1.5:** Ensure that transit planning is considered and integrated into all related elements of City planning.
 - **Policy C3-1.7:** Require submittal and implementation of a Transportation Management Plan (TMP) for all projects within the Urban Mixed-Use area, and encourage a TMP for all projects within the northeast quadrant.
 - **Policy C3-1.8:** Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.
- **Objective C3-2:** Ensure the consideration of the impacts of land use decisions on the City’s parking situation.
 - **Policy C3-2.1:** Ensure the provision of sufficient on-site parking in all new development.
 - **Policy C3-2.2:** Ensure that the City’s parking codes and zoning ordinances are kept up-to-date.
- **Objective C4-3:** Establish the City’s short-term (5-year) Capital Improvement Program (CIP) consistent with the Circulation Element and the entire General Plan, and ensure that the CIP incorporates adequate funding for the City’s circulation needs.
 - **Policy C4-3.1:** Identify and evaluate potential revenue sources for financing circulation system development and improvement projects.

The Specific Plan addresses the Circulation Element Goal, Objectives, and Policies related to the development of circulation policies that are consistent with other City policies. This section of the Specific Plan indicates the consistency of the Specific Plan with all the applicable Elements (Economic Development, Land Use, Circulation, Conservation, and Noise). The Plan provides for the upgrading of streets to maintain the level of service, transit planning is addressed, pedestrian and bicycle access is enhanced, parking is managed, and potential funding sources are identified.

4. Housing Element

Goal 1: Preserve and protect the existing housing stock by encouraging the rehabilitation of deteriorating dwelling units and the conservation of the currently sound housing stock.

- **Policy 1.2:** Encourage investment of public and private resources to foster neighborhood improvement.

Goal 2: Provide sufficient new, affordable housing opportunities in the city to meet the needs of groups with special requirements, including the needs of lower and moderate- income households.

- **Policy 2.1:** Provide regulations, as required by California Law, to facilitate additional housing and develop programs to serve special needs groups (including persons with developmental disabilities).
- **Policy 2.2:** Facilitate the creation of affordable housing opportunities for extremely low, very low and low- income households.

Goal 3: Provide opportunities for new housing construction in a variety of locations and a variety of densities.

- **Policy 3.1:** Provide for the construction of adequate housing in order to meet the goals of the Regional Housing Needs Assessment (RHNA).
- **Policy 3.3:** Facilitate development on vacant and underdeveloped property designated as residential or mixed-use to accommodate a diversity of types, prices and tenure.

Goal 4: Remove governmental constraints on housing development.

- **Policy 4.1:** Continue to allow second units, condominium conversions, caretaker units and second floor residential use in commercial zones as specified in the El Segundo Municipal Code.
- **Policy 4.3:** Facilitate timely development processing for residential construction projects and expedite the project review process.
- **Policy 4.4:** Facilitate provision of infrastructure to accommodate residential development.

The Specific Plan addresses the Housing Element goals and policies related to the development of a range of housing types, including affordable housing, within the Downtown. The Specific Plan provides standards and objectives to implement affordable housing opportunities throughout the Downtown with a mix of housing types to serve a wide range of income levels.

5. Open Space and Recreation Element

Objective 051-2 Private Facilities. Preserve existing, and support acquisition of additional, private park and recreation facilities to foster recognition of their value as community recreation and open space resources.

- **Policy 051-2.4:** Require all new residential developments with more than 20 units to provide on-site recreational open space.
- **Policy 051-2.5:** Encourage, through implementation of development incentives, the development of outdoor private recreational facilities, such as plazas, courtyards, and esplanades, in conjunction with non-residential development.

Objective 051-3 Recreation Programs. Provide recreational programs and facilities for all segments of the community.

- **Policy 051-3.3:** Encourage multi-family residential developments to provide active open space and recreation facilities which are maintained by homeowners associations.

Objective 051-5 Natural Resources. Protect natural open space resources and associated habitat.

- **Policy 051-5.2:** Promote street trees and landscaping as a desirable feature of the quality of life in El Segundo, by including in the City's Zoning Ordinance a requirement for a minimum amount of landscaping for all multi-family residential, commercial, and industrial development projects.
- **Policy 051-5.3:** Continue to support programs for the protection of the El Segundo Blue Butterfly.

The Specific Plan addresses the Open Space and Recreation Element objectives and policies related to the development of open space and gathering space and landscaping policies. The Plan provides for the development of open space areas such as plazas and courtyards that activate the Downtown and promotes the use of landscaping and habitat areas for the El Segundo Blue Butterfly.

6. Conservation Element

Goal CN4: El Segundo Blue Butterfly. Protect the rare and endangered El Segundo Blue Butterfly.

- **Policy CN4-1:** Develop and encourage environmental protection policies that protect sensitive habitat areas, including coordination with city, county, state, and federal agencies having jurisdiction over such areas.
- **Policy CN4-2:** Protect the coastal habitat of the El Segundo Blue Butterfly.

Goal CN5: Urban Landscape. Develop programs to protect, enhance and increase the amount and quality of the urban landscape to maximize aesthetic and environmental benefits.

- **Policy CN5-1:** Preserve the character and quality of existing neighborhood and civic landscapes.
- **Policy CN5-2:** Identify the characteristics and qualities of the urban landscape that are valued by the community.
- **Policy CN5-4:** Establish density and development standards that protect and reflect the character and quality of existing neighborhoods and minimize the loss of landscaped area.
- **Policy CN5-6:** Encourage that any new landscaped areas respect and incorporate the distinctive elements of the existing community landscape.

The Downtown Specific Plan is consistent with the urban landscape provisions of the Conservation Element. The Plan protects and enhances the quality of the urban landscape of the Downtown, particularly the characteristics and qualities identified by the community as being valued and designates habitat areas for the El Segundo Blue Butterfly.

7. Noise Element

Goal N1: Provision of a Noise-Safe Environment. Encourage a high quality environment within all parts of the City of El Segundo where the public's health, safety and welfare are not adversely affected by excessive noise.

- **Objective N1-2:** It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.
 - **Policy N1-2.1:** Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.
 - **Program N1-2.1A:** Address noise impacts in all environmental documents for discretionary approval projects to ensure that noise sources meet City Noise Ordinance standards. These sources may include: mechanical or electrical equipment, truck loading areas or outdoor speaker systems.

The Downtown Specific Plan is consistent with the applicable Noise Element Goal, Objective, Policy, and Program in that the Specific Plan requires that the current noise regulations of the Municipal Code be adhered to which address and mitigate any potential noise conflicts.



B Appendix



APPENDIX B: DEFINITIONS

A. Introduction

This appendix defines the permitted uses in this Specific Plan that are technical or specialized land uses that may not reflect common usage. Land uses not defined in this appendix are defined in ESMC Section 15-1-6 (Definitions).

B. Land Use Definitions

Alcohol Sales, Off-Site

Any establishment in which alcoholic beverages are sold for consumption off the premises.

Alcohol Sales, On-Site

Any establishment in which alcoholic beverages are sold for consumption on the premises.

Alcohol Sales, On-Site with Food Service

Any establishment in which alcoholic beverages are sold, served, or given away for consumption on-site as part of a restaurant, deli, market, or similar establishment where customers purchase food and beverages and consume the food and beverages on the premises.

Assembly Halls

A building or portion of a building, used for large-scale indoor gatherings of people. For example, assembly halls include private educational facilities; religious institutions; clubs; lodges; theaters; and similar kinds of facilities whether available for public or private use.

Brewery and Alcohol Production (including on-site consumption or restaurant)

An establishment that produces ales, beers, meads, hard ciders, wine, liquor and/or similar beverages on-site, and where customers purchase food or beverages and consume the food or beverages on the premises. Also includes incidental sale of beverages for on-site and off-site consumption in keeping with the regulations of the Alcohol Beverage Control (ABC) and Bureau of Alcohol, Tobacco, and Firearms (ATF).

Nightclub

A building which is primarily utilized for entertainment and is open in the evening and serves alcohol, and may or may not serve food. Nightclubs include interior floor space for dancing or standing in conjunction with an indoor entertainment activity, such as dance halls, discotheques, private clubs, lounges and cabarets. and other similar evening-oriented entertainment activities for adults.

Outdoor Dining

An exterior dining area within private property outside of the public right-of-way with seats and/or tables, umbrellas, portable heaters, lighting, potted plants, or other furnishings primarily intended for use by the customers of the business with which the furnishings are associated. Outdoor dining is ancillary and contiguous to an approved restaurant or business and located outside the walls of a building or structure, typically along the building frontage.

Parklets

Exterior dining/seating areas within the public right-of-way containing seats, tables, umbrellas, potted plants, and/or other furnishings primarily intended for use by customers of adjoining businesses. Parklets typically function as extensions of the public sidewalk and replace on-street parking spaces.

Primary Street Ground Floor Uses

Uses occupying at a minimum 25% of a building's floor area and the front 20 feet of a building, with the exception of any common hallway or access to uses behind or above. In cases of corner lots or other unique circumstances, the Director shall adjust the above requirements at his/her discretion.

Public Facilities

A building or structure owned, operated, or occupied by a governmental agency. Public facilities include: municipal, county, state or federal governmental facilities.

Studio/Sound Stages and Support Facilities

Space in an outdoor or indoor area, building, part of a building, structure, or a defined area, which is utilized primarily for the creation of film, television, music video, multimedia, or other related activities.

Temporary Outdoor Retail Sales Events

Temporary short-term sales or display of supplies or a retail activity in an permitted outdoor location that may be conducted under a non-permanent tent, canopy, or other sun shelter. Outdoor retail sales events shall not involve the construction of, or significant changes to, permanent buildings, paving, or structures. The Director of Community Development shall be responsible for reviewing and approving retail sales events, subject to any terms, conditions, or special limitations deemed necessary.

Underground Parking Facilities and Parking Structures

A basement equipped, designed, used, or intended to be used, for parking automobiles. A parking structure is intended primarily for the interior parking or storage of motor vehicles for any period of time.

APPENDIX C: AIR QUALITY STUDY

Air Quality Study

**El Segundo Downtown Specific Plan
Update Project**

September 13, 2023

noah tanski environmental consulting

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1. Introduction

This report evaluates the air quality impacts that could result from implementation of the El Segundo Downtown Specific Plan Update Project (Project). Supporting documents – such as calculation worksheets and modeling outputs – are included in the appendix to this report.

2. Project Description

The Project involves an update to the City’s adopted Downtown Specific Plan that would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes. The Project would allow for increases of up to 130,000 square feet of retail and restaurant uses, 200,000 square feet of office uses, 24,000 square feet of medical office uses, and 300 residential uses. Mobility enhancements would include expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which could affect the number of travel lanes on those streets. The Project would potentially relocate a portion of an existing truck route that is located on Main Street. It proposes the potential permanent closure of a portion of Richmond Street to vehicles, and a variety of other minor pedestrian and transit improvements (e.g., widened sidewalks, expanded outdoor seating and dining areas, bus stop enhancements, etc.). The Project would also include modifications to parking standards and strategies, as well as alternatives for on-street parking. Relatedly, the Project may potentially involve the construction of two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue.

3. Environmental Setting

3.1 Regulatory Framework

3.1.1 Federal

3.1.1.1 Clean Air Act

The Federal Clean Air Act (CAA) was first enacted in 1955 and has been amended numerous times in subsequent years, with the most recent amendments occurring in 1990. At the federal level, the United States Environmental Protection Agency (USEPA) is responsible for implementing some portions of the CAA (e.g., certain mobile source and other requirements). Other portions of the CAA (e.g., stationary source requirements) are implemented by state and local agencies. In California the California Clean Air Act (CCAA) is administered by the California Air Resources Board (CARB) at the state level and by the air quality management districts and air pollution control districts at the regional and local levels.

The CAA governs the establishment, review, and revision, as appropriate, of the National Ambient Air Quality Standards (NAAQS), which provide protection for the nation’s public health and the environment. NAAQS are based on quantitative characterizations of exposures and associated

risks to human health and the environment. The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress towards attainment and the incorporation of additional sanctions for failure to attain or to meet interim milestones. NAAQS have been established for seven major air pollutants: carbon monoxide (CO), nitrogen dioxide (NO₂), ozone (O₃), PM_{2.5} (particulate matter, 2.5 microns), PM₁₀ (particulate matter, 10 microns), sulfur dioxide (SO₂), and lead (Pb).

The CAA requires USEPA to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are shown in **Table 1**. USEPA has classified the Los Angeles County portion of the South Coast Air Basin (Basin) as a nonattainment area for O₃, PM_{2.5}, and lead.

Table 1
State and Federal Ambient Air Quality Standards and Attainment for L.A. County

Pollutant	Averaging Period	California		Federal	
		Standard	Attainment Status	Standard	Attainment Status
Ozone – O ₃	1-hour	0.09 ppm (180 µg/m ³)	Non-attainment	-	-
	8-hour	0.070 ppm (137 µg/m ³)	Non-attainment	0.070 ppm (137 µg/m ³)	Non-attainment
Respirable Particulate Matter – PM ₁₀	24-hour	50 µg/m ³	Non-attainment	150 µg/m ³	Attainment
	Annual Arithmetic Mean	20 µg/m ³	Non-attainment	-	-
Fine Particulate Matter – PM _{2.5}	24-hour	-	-	35 µg/m ³	Non-attainment
	Annual Arithmetic Mean	12 µg/m ³	Non-attainment	12 µg/m ³	Non-attainment
Carbon Monoxide – CO	1-hour	20 ppm (23 mg/m ³)	Attainment	35 ppm (40 mg/m ³)	Attainment
	8-hour	9.0 ppm (10 mg/m ³)	Attainment	9 ppm (10 mg/m ³)	Attainment
Nitrogen Dioxide – NO ₂	1-hour	0.18 ppm (338 µg/m ³)	Attainment	100 ppb (188 µg/m ³)	Attainment
	Annual Arithmetic Mean	0.030 ppm (57 µg/m ³)	Attainment	53 ppb (100 µg/m ³)	Attainment
Sulfur Dioxide – SO ₂	1-hour	0.25 ppm (655 µg/m ³)	Attainment	75 ppb (196 µg/m ³)	Attainment
	24-hour	0.04 ppm (105 µg/m ³)	Attainment	-	-

Lead – Pb	30-day average	1.5 µg/m ³	Attainment	-	-
	Calendar Quarter	-	-	0.15 µg/m ³	Non-attainment
<i>Source: Maps of State and Federal Area Designations, https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations. Accessed September 7, 2023.</i>					

3.1.2 State

3.1.2.1 California Clear Air Act

In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the CCAA. In California the CCAA is administered by CARB at the state level and by the air quality management districts and air pollution control districts at the regional and local levels. CARB, which became part of the California Environmental Protection Agency in 1991, is responsible for meeting the state requirements of the CAA, administering the CCAA, and establishing the California Ambient Air Quality Standards (CAAQS). The CCAA, as amended in 1992, requires all air districts in the State to achieve and maintain the CAAQS. CAAQS are generally more stringent than their corresponding NAAQS and incorporate additional standards for sulfates, hydrogen sulfide, vinyl chloride, and visibility-reducing particles. CAAQS define clean air: they represent the maximum amount of a pollutant averaged over a specified period of time that can be present in outdoor air without any harmful effects on people or the environment.

The CCAA requires CARB to designate areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS thresholds have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data shows that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a state standard and are not used as a basis for designating areas as nonattainment. Under the CCAA, the non-desert Los Angeles County portion of the Basin is designated as a nonattainment area for O₃, PM₁₀, and PM_{2.5}. The State standards and attainment/non-attainment are also shown in **Table 1**.

3.1.2.2 California Air Toxics Program

CARB's Air Toxics Program was established in 1983 in response to the adoption of AB 1807, the Toxic Air Contaminant Identification and Control Act. AB 1807 directs CARB and the State Office of Environmental Health Hazard Assessment (OEHHA) to identify toxic air contaminants (TACs) and determine whether any regulatory action is necessary to reduce their risks to public health. Substances formally identified as TACs include diesel particulate matter and environmental tobacco smoke.

3.1.2.3 Air Quality and Land Use Handbook: A Community Health Perspective

Released by CARB in 2005, the *Air Quality and Land Use Handbook: A Community Health Perspective* provides recommendations regarding the siting of new sensitive land uses near potential sources of TACs (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gas stations), as well as the siting of new TAC sources in proximity to existing sensitive land uses.¹ The recommendations are advisory and should not necessarily be interpreted as defined “buffer zones.” If a project or sensitive land uses are within the siting distance, CARB recommends further analysis.

3.1.3 Regional

3.1.3.1 South Coast Air Quality Management District

The Project is located within the 6,745-square-mile South Coast Air Basin (Basin). The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. It is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east; and the San Diego County line to the south. The South Coast Air Quality Management District (SCAQMD) is the agency principally responsible for air pollution control in the Basin. Specifically, SCAQMD is responsible for planning, implementing, and enforcing programs designed to attain and maintain CAAQS established by CARB and NAAQS established by the USEPA. All projects in the SCAQMD jurisdiction are subject to SCAQMD rules and regulations, including, but not limited to, the following:

- **Rule 401 Visible Emissions:** This rule prohibits air discharge that results in a plume that is as dark as or darker than what is designed as No. 1 Ringelmann Chart by the United States Bureau of Mines for an aggregate of three minutes in any one hour.
- **Rule 402 Nuisance:** This rule prohibits the discharge of “such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of people or 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.”
- **Rule 403 Fugitive Dust:** This rule mandates that projects reduce the amount of particulate matter entrained in the ambient air as a result of fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions from any active operation, open storage pile, or disturbed surface area.

3.1.3.2 2022 Air Quality Management Plan

SCAQMD’s 2022 Air Quality Management Plan (2022 AQMP) was adopted in December 2022 and represents the most updated regional blueprint for achieving federal air quality standards. It relies on emissions forecasts based on demographic and economic growth projections provided by the Southern California Association of Governments’ (SCAG) 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy (2020-2045 RTP/SCS).

¹ CARB, Air Quality and Land Use Handbook, A Community Health Perspective, April 2005.

3.1.3.3 Southern California Association of Governments

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties that is tasked with addressing regional issues relating to transportation, the economy, community development, and the environment. As the federally designated Metropolitan Planning Organization (MPO) for the six-county Southern California region, SCAG is required by law to ensure that transportation activities conform to, and are supportive of, regional and state air quality plan goals to attain NAAQS. Additionally, SCAG is a co-producer, along with the SCAQMD, of the transportation strategy and transportation control measure sections of the Basin's AQMP. The 2020-2045 RTP/SCS (Connect SoCal), SCAG's latest long-range plan, continues to recognize that transportation investments and future land use patterns are inextricably linked, and acknowledges how this relationship can help the region make choices that sustain existing resources while expanding efficiency, mobility, and accessibility for people across the region. In short, the 2020-2045 RTP/SCS offers a blueprint for how Southern California can grow more sustainably.

The 2020-2045 RTP/SCS land use pattern continues the trend of focusing new housing and employment growth in the region's Priority Growth Areas (PGAs) and aims to enhance and build out the region's transit network. PGA's such as Job Centers, Transit Priority Areas (TPAs), High Quality Transit Areas (HQTAs), Neighborhood Mobility Areas (NMAs), Livable Corridors, and Spheres of Influence (SOIs) account for just 4 percent of total land in the SCAG region, but they are projected to accommodate 64 percent of the region's future household growth and 74 percent of the region's future employment growth by 2045.² According to the 2020-2045 RTP/SCS, dense infill development in PGAs can help reduce travel distances, increase mobility options, leverage transit investments, and improve access to workplaces and other destinations, reducing vehicle miles traveled (VMT) and associated emissions.

3.1.4 City of El Segundo

3.1.4.1 El Segundo General Plan Air Quality Element

The City's General Plan Air Quality Element was prepared to address the issue of air pollution and its health and economic impacts, comply with the requirements of SCAQMD's 1991 AQMP, address the 1991 AQMP's measures for local government, and increase awareness of local and governmental responsibility for air quality.³ As explained earlier, the 2022 AQMP is the SCAQMD's current and latest AQMP for the Basin, but many of the Air Quality Element's goals, objectives, and policies are still relevant today. They are shown below:

Goal AQ1: Person Work Trip Reduction for Private Employees

Objective AQ1-1: A 30 percent reduction in private employee work trips in new and existing development through the use of any combination of alternate work weeks and telecommuting strategies.

² SCAG, Final 2020-2045 RTP/SCS, September 2020.

³ City of El Segundo, General Plan Air Quality Element, 1992.

Policy AQ1-1.1: It is the policy of the City of El Segundo that the City encourage businesses to adopt alternative work schedules and prepare guidelines to assist local businesses in the implementation of alternative work schedule programs.

Policy AQ1-1.2: It is the policy of the City of El Segundo that businesses be encouraged to establish and maintain telecommuting or work-at-home programs to reduce employee work trips.

Policy AQ1-1.3: It is the policy of the City of El Segundo that Transportation System Management (TSM) plans provide a 30 percent reduction in vehicle ridership or the equivalent Average Vehicle Ridership (AVR) per commute vehicle.

Goal AQ2: Person Work Trip Reduction for Local Government Employees

Objective AQ2-1: A 30 percent reduction in local government employee work trips using any combination of alternative work weeks and telecommuting strategies.

Policy AQ2-1.1: It is the policy of the City of El Segundo that a study be conducted to implement alternative work schedules and work-at-home programs for City employees that will maximize the potential for increasing employee productivity.

Policy AQ2-1.2: It is the policy of the City of El Segundo that the City designate an Employee Transportation Coordinator to promote and institute ridesharing and other programs to achieve a 30 percent reduction in vehicle ridership for City employees.

Goal AQ3: Vehicle Work Trip Reduction for Private Employees

Objective AQ3-1: Increase the proportion of work trips made by transit.

Policy AQ3-1.1: It is the policy of the City of El Segundo that the City continue to require employers in existing congested areas of the City and developers of large new developments to adopt Transportation System Management (TSM) plans and provide incentives for the provision of transit support facilities.

Policy AQ3-1.2: It is the policy of the City of El Segundo that it continues to require developer TSM plans to encourage trip reduction programs and development of transit and ridesharing facilities over highway capacity expansion in order to achieve and maintain mobility and air quality.

Policy AQ3-1.3: It is the policy of the City of El Segundo to cooperate with efforts to expand bus, rail, and other forms of transit within the Los Angeles region.

Goal AQ4: Reduce Motorized Transportation

Objective AQ4-1: Promote non-motorized transportation.

- Policy AQ4-1.1:** It is the policy of the City of El Segundo that the City actively encourage the development and maintenance of a high-quality network of pedestrian and bicycle routes, linked to key locations, in order to promote non-motorized transportation.
- Goal AQ5:** **Vehicle Work and Non-Work Trip Reduction**
- Objective AQ5-1:** Improve transit systems serving the City and implement parking control methods to reduce work and non-work trips.
- Policy AQ5-1.1:** It is the policy of the City of El Segundo that the City discourage the use of single-occupant vehicles in congested areas of the City by changing or modifying the availability and cost of parking.
- Policy AQ5-1.2:** It is the policy of the City of El Segundo that the City actively encourage the enhancement of transit performance and availability and establish developer fees to offset the costs of transit improvements required as a result of new developments.
- Goal AQ6:** **Reduction in Peak-period Truck Travel and Number and Severity of Truck-involved Accidents**
- Objective AQ6-1:** Pass the necessary ordinances and memorandums of understanding to divert truck traffic during peak traffic periods.
- Objective AQ6-1.1:** It is the policy of the City of El Segundo that commercial truck emissions be reduced by restricting delivery schedules to off-peak traffic periods, and by creating alternate routes that would increase the efficiency of the City's roadway system.
- Goal AQ7:** **Reduce Vehicle Emissions Through Traffic Flow Improvements**
- Objective AQ7-1:** Set annual objectives for the continued improvement of interconnected traffic signal control systems or appropriate non-interconnected synchronization methods on all streets where traffic volume and delay time is significant.
- Policy AQ7-1.1:** It is the policy of the City of El Segundo that a high priority be given to improve the flow of traffic through synchronization of signalized intersections, as this is among the most cost-effective means of reducing congestion, conserving energy, and improving air quality.
- Goal AQ8:** **Reduction in Tailpipe Emissions from Local Government Vehicle Fleets**
- Objective AQ8-1:** Support legislation which would improve vehicle/transportation technology and the conversion of vehicles by fleet operators to the use of "clean fuel."
- Policy AQ8-1.1:** It is the policy of the City of El Segundo that the City support legislation for the use and ownership of clean fuel vehicles.

Policy AQ8-1.2: It is the policy of the City of El Segundo that the City support legislation for research, development, and demonstration of clean fuel vehicles in both fleet service and passenger use.

Policy AQ8-1.3: It is the policy of the City of El Segundo that the City invest in clean fuel systems on new City fleet vehicles.

Goal AQ9: **Reduction in Length of Vehicle Trips**

Objective AQ9-1: Improve the City's jobs/housing relationship to achieve a reduction in the average length of commute-trips by the year 2010, as designated by SCAG.

Policy AQ9-1.1: It is the policy of the City of El Segundo that the City promote a better balance of jobs and housing within the City by considering housing proposals within areas of the City designated for Smoky Hollow Mixed-Use.

Policy AQ9-1.2: It is the policy of the City of El Segundo that the City participate in sub regional efforts with other cities or agencies to develop mutually beneficial approaches to improving the balance of jobs and housing.

Policy AQ9-1.3: It is the policy of the City of El Segundo that the City actively encourage the establishment of a shuttle bus system to transport employees and El Segundo residents between the east and west sides of the City.

Goal AQ10: **Reduction in Particulate Emissions from Paved and Unpaved Roads, Parking Lots, and Road and Building Construction**

Objective AQ10-1: Control particulate emissions by paving roads and parking lots or by adopting alternative methods to control particulates.

Policy AQ10-1.1: It is the policy of the City of El Segundo that an ordinance be adopted requiring the paving or use of alternative particulate control methods on roads with low levels of vehicle traffic and on dirt roads and parking lots located on industrialized properties such as Chevron and Edison.

Policy AQ10-1.2: It is the policy of the City of El Segundo to adopt incentives, regulations, and/or procedures to prohibit the use of building materials and methods which generate excessive pollutants.

Policy AQ10-1.3: It is the policy of the City of El Segundo that all new development projects meet or exceed requirements of the South Coast Air Quality Management District for reducing PM10 standards.

Goal AQ11: **Reduce Emissions Associated with Government Energy Consumption**

Objective AQ11-1: Reduce energy use by City government facilities with an emphasis on peak demand reduction as stated by SCAG.

- Policy AQ11-1.1:** It is the policy of the City of El Segundo that a study be prepared to initiate implementation of a program for retrofitting City buildings with a full range of energy conservation measures.
- Goal AQ12:** **Reduction in Residential, Commercial, and Industrial Energy Consumption**
- Objective AQ12-1:** Enact the recommendations of the AQMP Energy Working Group for commercial and residential buildings and adopt ordinances to mitigate air quality impacts from water and pool heating systems.
- Policy AQ12-1.1:** It is the policy of the City of El Segundo that an ordinance be adopted requiring all new swimming pool water heater systems to utilize solar, electric, or low NOX gas-fired water heaters, and/or pool covers.
- Policy AQ12-1.2:** It is the policy of the City of El Segundo that the City encourage the incorporation of energy conservation features in the design of new projects and the installation of conservation devices in existing developments.
- Policy AQ12-1.3:** It is the policy of the City of El Segundo to provide incentives and/or regulations to reduce emissions from residential and commercial water heating.
- Policy AQ12-1.4:** It is the policy of the City of El Segundo that new construction not preclude the use of solar energy systems by uses and buildings on adjacent properties and consider enactment of a comprehensive solar access ordinance.
- Goal AQ13:** **Increase Recycling of Solid Waste and Use of Recycled Materials by Glass and Paper Manufacturers**
- Objective AQ13-1:** Reduce the amount of solid waste by 25 percent by 1994, and 50 percent by 2000.
- Policy AQ13-1.1:** It is the policy of the City of El Segundo that the City continue to implement the programs proposed in the City's Solid Waste Management Plan, concurrent with California Assembly Bill 939, to achieve a 25 percent reduction in residential solid waste requiring disposal by 1995, and a 50 percent reduction by the year 2000.
- Goal AQ14:** **Prevent Exposure of People, Animals, and Other Living Organisms to Toxic Air Pollutants**
- Objective AQ14-1:** Restrict emissions of toxic air contaminants in and around the City and insure that sources which impact the City comply with all federal, state, regional, and local regulations.
- Policy AQ14-1.1:** It is the policy of the City of El Segundo to protect residents and others from exposure to toxic air pollutants by identifying major sources of toxic

contaminants in and around the City and insuring that the sources comply with all federal, state, regional, and local regulations.

Policy AQ14-1.2: It is the policy of the City of El Segundo to draft and implement ordinances, where deemed appropriate by the City Council in its discretion, which go beyond the AQMP and SCAQMD regulations to restrict emissions of toxic air contaminants from sources of toxic air pollutants which impact the City of El Segundo.

Goal AQ15: Prevent Exposure of People, Animals, and Other Living Organisms to Unhealthful Levels of Air Pollution

Objective AQ15-1: Reduce unsafe levels of air pollutants impacting the City.

Policy AQ15-1.1: It is the policy of the City of El Segundo to protect the residents of the City and others from exposure to unsafe levels of air pollution, including but not limited to, pollutants such as volatile organic compounds, particulates, oxides of nitrogen, oxides of sulfur, lead, ozone, and carbon monoxide, by taking all appropriate air pollution control measures to reduce unsafe levels of air pollutants impacting the City.

Policy AQ15-1.2: It is the policy of the City of El Segundo to coordinate with the SCAQMD to ensure that all elements of the AQMP regarding reduction of all air pollutant emissions are being met and are being enforced.

Policy AQ15-1.3: It is the policy of the City of El Segundo to draft and implement ordinances where deemed appropriate by the City Council in its discretion, which go beyond the AQMP and SCAQMD regulations to reduce emission of and exposure to air pollutants which impact the City of El Segundo.

Policy AQ15-1.4: It is the policy of the City of El Segundo to continue working with the City of Los Angeles to eliminate odor problems from the Hyperion Treatment Plant; this will include the continuation of the Mitigation Monitoring Implementation Plan.

3.1.4.2 El Segundo Municipal Code

The City of El Segundo Municipal Code contains the following standards related to air quality:

Section 7-3-1: It is the policy to prohibit unnecessary and excessive emission of dust and particulate matter from all sources subject to its police power. Therefore, the City Council does ordain and declare that creating, maintaining, causing or allowing to be created, maintained, or caused, any emissions of dust or particulate matter in a manner prohibited by or not in conformity with the provisions of this Chapter, is a public nuisance and shall be punished as such.

A. Dust Emissions: A person shall not create, maintain or cause or allow to be created, maintained or caused, the emissions of dust or

particulate matter from any transport, handling, construction, demolition, excavation, grading, clearing of land or storage activity so that the presence of such dust or particulate matter remains visible in the atmosphere beyond the property line of the emission source.

- B. Exclusions: A person or entity shall not be found in violation of subsection (A) of this Section if that person or entity has taken every reasonable precaution to minimize the dust or particulate matter emissions resulting from its activity. Reasonable precautions include, but are not limited to, the following: site watering; soil binders; street sweeping; organic control erosion amts; covering loose soil; sloping and bracing excavation sites to minimize erosion; and establishing ground cover.

3.2 Pollutants and Effects

3.2.1 State and Federal Criteria Pollutants

Air quality is measured by the ambient air concentrations of seven pollutants that have been identified by the USEPA due to their potentially harmful effects on public health and the environment. These “criteria air pollutants” include carbon monoxide, ground-level ozone, nitrogen dioxide, sulfur dioxide, particulate matter ten microns or less in diameter, particulate matter 2.5 microns or less in diameter, and lead. The following descriptions of each criteria air pollutant and their health effects are based on information provided by the USEPA and the SCAQMD.^{4,5}

Carbon Monoxide – CO

CO is a colorless and odorless gas that is released when something is burned. Outdoors, the greatest sources of CO are cars, trucks, and other vehicles or machinery that burn fossil fuels. Unvented kerosene and gas space heaters, leaking chimneys and furnaces, and gas stoves can release CO and affect air quality indoors. Breathing air with elevated concentrations of CO reduces the amount of oxygen that can be transported via the blood stream and can lead to weakened heart contractions; as a result, CO inhalation can be particularly harmful to people with chronic heart disease. At moderate concentrations, CO inhalation can cause nausea, dizziness, and headaches. High concentrations of CO may be fatal; however, such conditions are not likely to occur outdoors.

Ozone – O₃

O₃ is a colorless gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO_x) undergo slow photochemical reactions in the presence of ultraviolet sunlight. The greatest source of VOC and NO_x emissions is automobile exhaust. O₃ concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperatures are favorable to its formation. Elevated levels of O₃ irritate the lungs and airways and may cause throat and chest pain, as well as coughing, thereby increasing

⁴ USEPA, Criteria Air Pollutants, www.epa.gov/criteria-air-pollutants.

⁵ SCAQMD, Final 2012 Air Quality Management Plan, February 2013.

susceptibility to respiratory infections and reducing the ability to exercise. Effects are more severe in people with asthma and other respiratory ailments. Long-term exposure may lead to the scarring of lung tissue and reduced lung efficiency.

Nitrogen Dioxide – NO₂

NO₂ is primarily a byproduct of fossil fuel combustion and is therefore emitted by automobiles, power plants, and industrial facilities. The principal form of nitrogen oxide produced by fossil fuel combustion is nitric oxide (NO), which reacts quickly to form NO₂, creating the mixture of NO and NO₂ commonly called NO_x. NO₂ absorbs blue light and results in reduced visibility and a brownish-red cast to the atmosphere. NO₂ also contributes to the formation of PM₁₀. Nitrogen oxides irritate the nose and throat and increase susceptibility to respiratory infections, especially in people with asthma. Longer exposures to elevated concentrations of NO₂ may even contribute to the development of asthma. The principal concern of NO_x is as a precursor to the formation of ozone.

Sulfur Dioxide – SO₂

Sulfur oxides (SO_x) are compounds of sulfur and oxygen molecules. SO₂ is the predominant form found in the lower atmosphere and is a product of burning sulfur or sulfur-containing materials. Major sources of SO₂ include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. SO₂ may aggravate lung diseases, especially bronchitis. It also constricts breathing passages, especially in asthmatics and people involved in moderate to heavy exercise. SO₂ may cause wheezing, shortness of breath, and coughing. High levels of particulates appear to worsen the effect of SO₂, and long-term exposure to both pollutants leads to higher rates of respiratory illnesses.

Particulate Matter (PM₁₀ and PM_{2.5})

The human body naturally prevents the entry of larger particles into itself. However, smaller particles less than 10 microns (PM₁₀) or even less than 2.5 microns (PM_{2.5}) in diameter can enter the body and become trapped in the nose, throat, and upper respiratory tract. Here, these particulates may aggravate existing heart and lung diseases, affect the body's defenses against inhaled materials, and damage lung tissue. Those most sensitive to PM₁₀ and PM_{2.5} include children, the elderly, and those with chronic lung and/or heart disease.

Lead – Pb

Airborne lead is emitted from industrial facilities and from the sanding or removal of old lead-based paint. Smelting and other metal processing activities are the primary sources of lead emissions. The lead effects most commonly encountered in current populations are neurological effects in children and cardiovascular effects in adults (e.g., high blood pressure and heart disease). Infants and young children are especially sensitive to even low levels of lead, which may contribute to behavioral problems, learning deficits, and lowered IQ.

3.2.2 Toxic Air Contaminants - TACs

TACs refer to a diverse group of “non-criteria” air pollutants that can affect human health but have not had ambient air quality standards established for them. This is not because they are

fundamentally different from the pollutants discussed above, but because their effects tend to be local rather than regional. As discussed earlier, CARB and OEHHA determine if a substance should be formally identified, or “listed,” as a TAC in California. A complete list of these substances is maintained on CARB’s website.⁶

One key TAC is diesel particulate matter (diesel PM), which is emitted in diesel engine exhaust. SCAQMD’s 2021 Multiple Air Toxics Exposure Study V (MATES V) determined that about 88 percent of the carcinogenic risk from air toxics in the Basin is attributable to mobile source emissions. Of the three carcinogenic TACs that constitute the majority of the known health risk from gas- and diesel-powered vehicle emissions – diesel PM from primarily trucks, and benzene and 1,3-butadiene from passenger vehicles – diesel PM is responsible for the greatest potential cancer risk from vehicle traffic.⁷ Overall, diesel PM was found to account for, on average, about 50 percent of the air toxics risk in the Basin.⁸ In addition to its carcinogenic potential, diesel PM may also contribute to increased respiratory and cardiovascular hospitalizations, worsened asthma and other respiratory symptoms, decreased lung function in children, and premature death for people already with heart or lung disease. Those most vulnerable to the non-cancer health effects of diesel PM are children whose lungs are still developing and the elderly who may have other chronic health problems.⁹

3.2.3 Volatile Organic Compounds - VOCs

VOCs are typically formed from the combustion of fuels and/or released through the evaporation of organic liquids. Some VOCs are also classified by the state as toxic air contaminants, though there are no VOC-specific ambient air quality standards. Once emitted, VOCs can mix in the air with other pollutants (e.g. NO_x, CO, SO₂...) and contribute to the formation of photochemical smog.

3.3 Existing Conditions

As discussed earlier, the Project is located within the 6,745-square-mile South Coast Air Basin that includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality within the Basin is influenced by a wide range of emissions sources, such as dense population centers, heavy vehicular traffic, and industry. These sources in addition to the topography and climate of Southern California combine to make the Basin an area of high air pollution potential. Particularly, ambient pollution concentrations recorded in the Los Angeles County portion of the Basin are among the highest in the four counties comprising the Basin. The USEPA has classified Los Angeles County as a nonattainment area for O₃, PM_{2.5}, and lead, meaning that the Basin does not meet NAAQS for these pollutants. Additionally, this portion of the Basin also does not meet CAAQS for O₃, PM₁₀, and PM_{2.5}. **Table 1**, above,

⁶ CARB, Toxic Air Contaminant Identification List, www.arb.ca.gov/toxics/id/taclist.htm, last reviewed by CARB July 18, 2011.

⁷ CARB, Air Quality and Land Use Handbook: A Community Health Perspective, April 2005.

⁸ SCAQMD, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES V), 2021.

⁹ CARB, Overview: Diesel Exhaust & Health, ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health.

summarizes State and National Ambient Air Quality Standards and the attainment status for Los Angeles County with respect to each criteria pollutant.

3.3.1 Existing Pollutant Levels

The SCAQMD monitors air quality conditions in 38 source receptor areas (“SRAs”) throughout the Basin. The Project is located in SCAQMD’s SRA No. 3, “Southwest Coastal Los Angeles County.” **Table 2** shows pollutant levels, State and federal standards, and the number of exceedances recorded in SRA No. 3 from 2019 through 2021. As shown, the eight-hour Federal and State standard for O₃ was exceeded twice during this three-year period, and the State one-hour standard was exceeded once. The State standard for PM₁₀ was exceeded twice. The Federal standard for PM₁₀ was not exceeded. CO, NO₂, and SO₂ levels did not exceed their respective CAAQS or NAAQS during this period. Data for PM_{2.5} is not available for the time period.

Table 2
Ambient Air Quality Data – SRA No. 3 “Southwest Coastal Los Angeles County”

Pollutants and State and Federal Standards	Maximum Concentrations and Frequencies of State/Federal Standards Exceedance		
	2019	2020	2021
Ozone – O₃			
Maximum 1-hour Concentration (ppm)	0.082	0.117	0.059
Maximum 8-hour Concentration (ppm)	0.067	0.074	0.049
Days > 0.070 ppm (Federal/State 8-hour standard)	0	2	0
Days > 0.09 ppm (State 1-hour standard)	0	1	0
Carbon Monoxide – CO			
Maximum 1-hour Concentration (ppm)	1.8	1.6	1.7
Maximum 8-hour Concentration (ppm)	1.3	1.3	1.3
Days > 35 ppm (Federal 1-hour standard)	0	0	0
Days > 20 ppm (State 1-hour standard)	0	0	0
Days > 9.0 ppm (Federal/State 8-hour standard)	0	0	0
Nitrogen Dioxide – NO₂			
Maximum 1-hour Concentration (ppb)	56.6	59.7	62.8
Days > 100 ppb (Federal 1-hour standard)	0	0	0
Days > 0.18 ppm (State 1-hour standard)	0	0	0
PM₁₀			
Maximum 24-hour Concentration (µm/m ³)	62	43	33
Days > 150 µg/m ³ (Federal 24-hour standard)	0	0	0
Days > 50 µg/m ³ (State 24-hour standard)	2	0	0
PM_{2.5}			
Maximum 24-hour Concentration (µg/m ³)	N/A	N/A	N/A
Days > 35 µg/m ³ (Federal 24-hour standard)	N/A	N/A	N/A
Sulfur Dioxide – SO₂			
Maximum 24-hour Concentration (ppb)	8.2	6.0	7.7
Days > 75 ppb (Federal 1-hour standard)	0	0	0

Days > 250 ppb (State 1-hour standard)	0	0	0
Days > 40 ppb (State 24-hour standard)	0	0	0
Lead - Pb			
Maximum Monthly Average Concentration ($\mu\text{g}/\text{m}^3$)	0.004	0.008	0.012
Maximum 3-Month Rolling Averages ($\mu\text{g}/\text{m}^3$)	0.004	0.005	0.012
<p><i>Notes:</i> <i>N/A = data not available</i> <i>ppm = parts per million of air, by volume</i> <i>ppb = parts per billion of air, by volume</i> $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter</p> <p><i>Source: SCAQMD Historical Data By Year, www.aqmd.gov/home/air-quality/air-quality-data-studies/historical-data-by-year. Accessed September 11, 2023.</i></p>			

3.3.2 Existing Health Risk

The Multiple Air Toxics Exposure Study V (MATES V) is the latest air toxics monitoring and evaluation study conducted in the Air Basin. In short, MATES V is a modeling effort to characterize risk from air toxics across the Air Basin. The Specific Plan area is located within the 90245 zip code. Based on the MATES V model, the calculated cancer risk from air toxics in the 90245 zip code is approximately 540 in one million, which is higher than the Air Basin's average risk of 454 per one million. The air toxics risk in the Project's zip code is higher than it is for 78.0 percent of the population with the Air Basin.¹⁰

The OEHHA, on behalf of the California Environmental Protection Agency (CalEPA), provides a screening tool called CalEnviroScreen that identifies which California communities are disproportionately burdened by, and vulnerable to, multiple sources of pollution. The tool ranks census tracts in California based on potential exposures to pollutants, adverse environmental conditions, socioeconomic factors, and prevalence of certain health conditions. According to CalEnviroScreen 4.0, the Specific Plan's pollution-specific burden, irrespective of other socioeconomic factors, is ranked 84th percentile.¹¹

3.3.3 Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. Generally speaking, sensitive land uses, or sensitive receptors, are those where sensitive individuals are most likely to spend time. Individuals most susceptible to poor air quality include children, the elderly, athletes, and those with cardiovascular and chronic respiratory diseases. As a result, land uses sensitive to air quality may include schools (i.e., elementary schools or high schools), childcare centers, parks and playgrounds, long-term health care facilities, rehabilitation facilities, convalescent facilities,

¹⁰ SCAQMD, Multiple Air Toxics Exposure Study V, MATES Data Visualization Tool, https://experience.arcgis.com/experience/79d3b6304912414bb21ebdde80100b23/page/home/?data_id=dataSource_105-a5ba9580e3aa43508a793fac819a5a4d%3A204&views=view_1. Accessed September 11, 2023.

¹¹ Office of Environmental Health Hazard Assessment, CalEnviroScreen 4.0. https://experience.arcgis.com/experience/11d2f52282a54ceebcac7428e6184203/page/CalEnviroScreen-4_0/. September 11, 2023.

retirement facilities, residences, and athletic facilities. For the purposes of CEQA analysis, the SCAQMD considers a sensitive receptor to be a receptor such as a residence, hospital, or convalescent facility where an individual could remain for 24 hours. The SCAQMD does not consider commercial and industrial facilities to be sensitive receptors because employees do not typically remain onsite at such facilities for 24 hours. However, the SCAQMD suggests that LSTs based on shorter averaging periods, such as the NO₂ and CO LSTs, may also be applied to receptors such as commercial and industrial facilities since it is reasonable to assume that workers at these sites may be present for up to eight hours.¹²

The Project's nearest sensitive receptors, as defined by the SCAQMD (e.g., residences, hospitals, or convalescent facilities) are the following:

- Multi-family residential building (350 Richmond Street) – this sensitive receptor is located within the Specific Plan area.
- Residential uses along Richmond Street, near Grand Avenue – these sensitive receptors are located within the Specific Plan area.
- Residential land uses located along and west of Richmond Street – other sensitive receptors located along Richmond Street are directly north of the Specific Plan area, across Holly Avenue.
- Residential land uses located along and east of Standard Street – the nearest residential uses are directly east of the Specific Plan area, across Standard Street.
- Residential land uses located along and west of Concord Street – the nearest residential uses are directly west of the Specific Plan area, across Concord Street.

The Project would allow for the construction of up to 300 residential units, which could also be sensitive receptors to the air emissions of future development under the Project.

Though not technically sensitive receptors, as defined by the SCAQMD, the following receptors are also worth identifying:

- Richmond Street Elementary School (615 Richmond Street) – approximately 275 feet northeast of the Specific Plan area.
- El Segundo High School (640 Main Street) – directly north of the Specific Plan area, across Mariposa Avenue.
- El Segundo Pre-School (301 West Grand Avenue) – directly west of the Specific Plan area, across Concord Street.

Non-sensitive commercial land uses where workers may be present for up to eight hours include a multitude of uses located within the Specific Plan area.

¹² SCAQMD, Final Localized Significance Threshold Methodology, June 2003. Revised July 2008.

4. Project Impacts

4.1 Thresholds of Significance

4.1.1 State CEQA Guidelines Appendix G

In accordance with Appendix G of the CEQA Guidelines, the Project would have a significant impact related to air quality if the Project would:

- a) ***Conflict with or obstruct implementation of the applicable air quality plan?***
- 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?***
- c) ***Expose sensitive receptors to substantial pollutant concentrations?***
- d) ***Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

4.2.1 Criteria Pollutants – Construction

The following criteria set forth in the SCAQMD's CEQA Air Quality Handbook serve as quantitative air quality standards to be used to evaluate project construction impacts with respect to the Appendix G thresholds. Under these thresholds, a significant impact would occur if:

- Regional emissions from both direct and indirect sources exceed the thresholds shown in **Table 3**.
- Maximum on-site daily localized emissions exceed the LSTs also shown in **Table 3**.

Table 3
SCAQMD Construction Emissions Thresholds

Criteria Pollutant	Construction Emissions (lbs per day)	
	Regional	Localized ^A
Volatile Organic Compounds – VOCs	75	-
Nitrogen Oxides - NO _x	100	131
Carbon Monoxide – CO	550	967
Sulfur Oxides - SO _x	150	-
Respirable Particulates – PM ₁₀	150	8
Fine Particulates – PM _{2.5}	55	5

^A Localized significance thresholds assumed the following:

- The Project is located in SRA No. 3, "Southwest Coastal Los Angeles County."

Sources: SCAQMD, Air Quality Significance Thresholds, revised April 2019; and, SCAQMD, LST Methodology Appendix C – Mass Rate LST Look-Up Table, October 2009.

The LSTs shown in **Table 3** are representative of a two-acre project site located within 25 meters of sensitive receptors. As explained further below, a two-acre project site corresponds with the scenario addressed in the Project’s construction analysis, which conservatively assumes that up to ten percent of the Project – more specifically ten percent of the increases in land uses allowed by the Project (i.e., 20,000 square feet of the allowable 200,000 square feet increase in office uses) – could be under construction simultaneously. 25 meters is the shortest receptor distance used for analysis per the SCAQMD’s LST methodology, and it results in the most stringent emissions thresholds for a given project size.

4.2.1 Criteria Pollutants – Operations

The following SCAQMD thresholds serve as quantitative air quality standards to evaluate project operational impacts with respect to the Appendix G thresholds. Under these thresholds, a significant impact would occur if:

- Operational emissions from both on- and off-site sources exceed the regional thresholds shown in **Table 4**.
- Maximum on-site daily localized emissions exceed the LSTs also shown in **Table 4**.
- The Project creates an odor nuisance pursuant to SCAQMD Rule 402.

Table 4
SCAQMD Operational Emissions Thresholds

Criteria Pollutant	Operational Emissions (lbs per day)	
	Regional	Localized ^A
Volatile Organic Compounds - VOCs	55	-
Nitrogen Oxides - NO _x	55	91
Carbon Monoxide – CO	550	664
Sulfur Oxides - SO _x	150	-
Respirable Particulates – PM ₁₀	150	1
Fine Particulates – PM _{2.5}	55	1

^A Localized significance thresholds assumed the following:

- The Project is located in SRA No. 3, “Southwest Coastal Los Angeles County.”

Sources: SCAQMD, Air Quality Significance Thresholds, revised March 2023; and, SCAQMD, LST Methodology Appendix C – Mass Rate LST Look-Up Table, October 2009.

The LSTs shown in **Table 4** are representative of a one-acre project site located within 25 meters of sensitive receptors. A one-acre project site is the smallest project size used for analysis per the SCAQMD’s LST methodology. 25 meters is the shortest receptor distance used for analysis in this methodology. Thus, use of these assumptions is conservative and results in the most stringent emissions thresholds under the SCAQMD’s LST methodology.

4.2.3 TACs – Health Risks

The following SCAQMD thresholds are utilized to evaluate project construction and operations-related TAC impacts with respect to the Appendix G thresholds. Under these thresholds, a significant impact would occur if the Project results in:

- A maximum incremental cancer risk greater than or equal to 10 in one million.
- A population wide cancer burden greater than 0.5 (in areas where existing cancer risk is greater than or equal to one in one million).
- A chronic or acute hazard index greater than or equal to 1.0.

5. Analysis of Project Impacts

5.1 Threshold a):

Would the project conflict with or obstruct implementation of the applicable air quality plan?

5.1.1 SCAQMD 2022 AQMP and SCAG 2020-2045 RTP/SCS Consistency

The following analysis assesses the Project's consistency with the SCAQMD's 2022 AQMP and SCAG's latest 2020-2045 RTP/SCS. As discussed earlier, the 2022 AQMP's projections for achieving state and federal air quality goals are based on population, housing, and employment trend assumptions in the 2020-2045 RTP/SCS, which are themselves largely based on growth forecasts from local governments like the City of El Segundo. Therefore, a project is consistent with the 2022 AQMP, in part, if it is consistent with the population, housing, and employment assumptions and smart growth policies that were used in the formation of the AQMP.

The Project's development would not exceed the growth assumptions of the 2020-2045 RTP/SCS and therefore would not result in emissions that are unaccounted for by the 2022 AQMP. As noted earlier, Priority Growth Areas (PGAs) such as Job Centers, Transit Priority Areas (TPAs), High Quality Transit Areas (HQTAs), Neighborhood Mobility Areas (NMAs), Livable Corridors, and Spheres of Influence (SOIs) account for only four percent of the SCAG region's total land area, but the 2020-2045 RTP/SCS anticipates that 64 percent of new household growth and 74 percent of employment growth will occur in these PGAs. According to the 2020-2045 RTP/SCS, dense infill development in PGAs can support the goals of the 2020-2045 RTP/SCS by reducing travel distances, increasing mobility options, improving access to workplaces, leveraging transit investments, and conserving the region's resource areas. Thus, the 2020-2045 RTP/SCS emphasizes new infill construction in PGAs and assumes a significant increase in multi-family housing and other dense urban uses built in such locations, in some cases outpacing what is currently anticipated by local general plans. Projects fitting this land use pattern are consistent with the 2020-2045 RTP/SCS.

The Downtown Specific Plan Update aims to achieve or bolster this land use pattern within the Specific Plan area. First, the Specific Plan area is already designated a NMA. The 2020-2045 RTP/SCS targets growth in NMAs because of NMAs robust residential to non-residential land use connections and high roadway intersection densities. These features promote safer, multimodal, short trips and can reduce reliance on single occupancy vehicles, reducing VMT. The Project's Transportation Assessment, prepared by Fehr and Peers, supports this, concluding that the Project would result in a reduction of VMT per service population as compared to citywide baselines. On this basis alone, development of the Project and its land uses within the Specific Plan area would be consistent with the 2020-2045 RTP/SCS's goals and growth assumptions that emphasize dense infill development within PGAs. Second, the Project proposes a range of transportation and mobility improvements that would bolster the area's existing walkability and promote alternative transportation modes. For example, the Project proposes the following improvements:

- Pedestrian crossing enhancements at 12 locations
- Area-wide sidewalk curb ramp enhancements
- Bicycle mobility enhancements on two roadway segments
- Area-wide bicycle accommodation and wayfinding enhancements
- Bus stop enhancements at six existing bus stops
- Signal operation enhancements on two roadway segments
- Area-wide intersection control improvements (signage and striping)
- In-road bollard receptacles for temporary street closures at two locations
- Area-wide on-street parking striping enhancements
- Area-wide off-street parking optimization enhancements

By implementing these transportation and mobility improvements and by focusing dense new retail, commercial, and residential uses within a PGA, the Project fits the land use pattern adopted and emphasized by the 2020-2045 RTP/SCS and would contribute directly to its goals. The Project would not result in growth – or accompanying emissions – that are unaccounted for by the 2020-2045 RTP/SCS or the 2022 AQMP. Projects that are consistent with the 2020-2045 RTP/SCS are part of the regional solution for meeting the 2022 AQMP's air pollution reduction goals. In this regard, the Project would not have a significant long-term impact on the region's ability to meet state and federal air quality standards.

Additionally, to be discussed further below, pollutant emissions associated with the construction and operations of future projects facilitated by the Downtown Specific Plan Update would neither exceed nor substantially contribute to any exceedance of ambient air quality standards and thresholds, nor would they interfere with the AQMP's attainment of air quality standards or interim emissions reductions.

Because Project-related growth would be consistent with 2022 AQMP projections that are themselves based on 2020-2045 RTP/SCS projections, and because pollutant emissions associated with the Project would neither exceed nor substantially contribute to any exceedance of ambient air quality standards and thresholds, the Project would not conflict with or obstruct implementation of the 2022 AQMP, and this impact would be **less than significant**.

5.2 Threshold 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 (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

5.2.1 Construction Emissions

By amending the land use designation and zoning on eight parcels within the Specific Plan area, the Downtown Specific Plan Update would facilitate construction of projects within the Specific Plan area through 2040. These projects could occur on any property within the Specific Plan area and affect existing or future land uses located within or surrounding the Specific Plan area, including sensitive receptors such as residences and schools. Thus, this analysis broadly addresses the potential for Project implementation to result in substantial emissions of criteria pollutants.

Construction of projects facilitated by the Downtown Specific Plan Update would generate criteria pollutant emissions throughout the implementation period through 2040. This does not mean that all facilitated projects would be under construction simultaneously until 2040; the City conservatively estimates that a maximum 10 percent of buildout allowed under the Project could be under construction in any given year, but there are also likely to be periods in which no construction occurs. The exact location and types of development are not known, but the general location and types of development can be reasonably anticipated. For example, projects would likely be concentrated along Main Street and would consist mainly of low-rise or mid-rise buildings, in accordance with existing and proposed site-development standards for the Project's districts. Construction would involve phases such as demolition, grading, building construction, paving, and architectural coating activities.¹³ Fugitive dust (PM₁₀) emissions would typically be greatest during demolition and grading activities due to the disturbance of soils and debris. NO_x and other emissions would result from the combustion of diesel fuels used to power off-road construction vehicles (e.g., backhoes, bulldozers, etc.) and trucks. Worker, vendor, and other

¹³ The Specific Plan area is highly urbanized and does not contain natural lands that would involve the types of land clearing activities (e.g., grubbing, tree/stump removal, etc.) associated with site preparation assumptions in CalEEMod.

construction-related vehicle trips would also generate criteria pollutant emissions. The magnitude of construction emissions and their impacts to sensitive receptors would be dependent on project-specific factors that are not known at this time (e.g., proximity to sensitive receptors, the types and quantity of equipment utilized by projects, the number of construction vehicle trips generated by projects, etc.), but given the allowable uses and typical construction activities, as well as SCAQMD's rules for fugitive dust, it is nevertheless possible to conservatively estimate construction emissions – and assess the significance of construction emissions – that would be associated with construction of projects facilitated by the Downtown Specific Plan Update. As noted earlier, the City conservatively estimates that a maximum 10 percent of buildout allowed under the Project could be under construction in any given year (see **Table 5**).

Table 5
Specific Plan Buildout, Average, and Worst-Case Construction Estimates

Land Use	Total Allowable Land Use Increase (Full Buildout) ^A	Average Year (For 25 years)	Worst-Case Year (10% of Full Buildout)
Retail and Restaurant	130,000 sf	5,200 sf	13,000 sf
Office	200,000 sf	8,000 sf	20,000 sf
Medical Office	24,000 sf	960 sf	2,400 sf
Residential	300 units	12 units	30 units

Notes:

^A The buildout values in this table do not represent the total development square footage that would exist in the Plan's horizon year (2040). Rather, these values represent the maximum new square footage that could be constructed by 2040. The values do not include remodeling of existing buildings and transportation/mobility enhancements (e.g., pedestrian crossing enhancements, bus stop improvements, signal operation enhancements, etc), which would not result in significant construction emissions.

sf = square feet

Source: NTEC, 2023.

Emissions associated with the construction of these uses were estimated using CalEEMod version 2022, which draws on extensive construction survey data of construction equipment usage, construction equipment emissions, construction phase lengths, and other factors. Since multiple projects may occur at the same time, all construction phases were conservatively assumed to overlap. Construction emissions were estimated based on activity in year 2024. Due to the changeover in construction fleets as older equipment is replaced with newer, cleaner equipment, it is anticipated that maximum daily emissions would decrease as development occurs beyond 2024.¹⁴

Modeled construction emissions are shown below in **Table 6**. Regional thresholds and LSTs for each air pollutant are also shown for comparison. As noted earlier, LSTs for a two-acre project

¹⁴ For example, according to CARB, Tier 0 (uncontrolled), Tier 1, and Tier 2 off-road diesel vehicles make up one third of the statewide fleet reported to CARB but contributed to 60 percent of NO_x and PM emissions in 2022. CARB's 2022 Amendments to the In-Use Off-Road Diesel-Fueled Fleets Regulation would phase out this equipment in large fleets by 2028, medium fleets by 2030, and small fleets by 2032, substantially reducing NO_x and PM emissions.

size were conservatively utilized based on the area of the estimated uses, but it is more likely that construction projects would be spread across the 43.8-acre Specific Plan area and not concentrated in a single two-acre location. As shown, the Project's unmitigated regional construction emissions would not exceed SCAQMD regional significance thresholds for VOC, NO_x, CO, SO_x, PM₁₀, or PM_{2.5}. Local emissions also would not exceed SCAQMD LSTs for NO_x, CO, PM₁₀, or PM_{2.5}. As a result, the Project's construction-related emissions impacts on regional and localized air quality would be **less than significant**.

**Table 6
Maximum Regional and Localized Daily Construction Emissions**

	Emissions in lbs per day					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Regional Emissions						
Summer 2024	27.6	52.6	56.9	0.11	8.03	3.69
Winter 2024	27.6	52.9	56.0	0.11	8.03	3.69
Maximum Regional Emissions	27.6	52.9	56.9	0.11	8.03	3.69
Regional Daily Threshold	75	100	550	150	150	55
Exceed Threshold?	No	No	No	No	No	No
Localized Emissions						
Demolition	1.61	15.6	16.0	0.02	2.5	0.90
Grading	1.65	15.9	15.4	0.02	2.58	1.57
Building Construction	1.13	9.44	10.1	0.02	0.37	0.34
Paving	0.53	4.90	6.53	0.01	0.23	0.21
Architectural Coating	22.25	0.91	1.15	<0.01	0.03	0.03
Maximum Combined Emissions	27.17	46.75	49.18	0.07	5.71	3.05
Localized Significance Threshold	-	131	967	-	8	5
Exceed Threshold?	-	No	No	-	No	No
<i>Source: NTEC, 2023.</i>						

5.2.2 Operations Emissions

As explained earlier and shown in **Table 5**, implementation of the Downtown Specific Plan Update would allow for an additional 130,000 square feet of retail and restaurant land uses, 200,000 square feet of office space, 24,000 square feet of medical office space, and 300 residential units within the Specific Plan area. Emissions associated with these additional uses were also calculated using CalEEMod version 2022. Three scenarios were modeled, each of which assumes full buildout of these allowable uses: 2024, 2030, and 2040. The 2024 buildout scenario is hypothetical and shown for informational purposes: reasonably, full buildout would not occur by 2024. The 2030 scenario represents an aggressive scenario in which full buildout occurs by 2030, which is also unlikely but nonetheless plausible. The 2040 scenario demonstrates what emissions would be by the horizon year. Taken together, the scenarios demonstrate (1) that the Project's maximum daily emissions would not exceed SCAQMD's regional significance thresholds or LSTs and (2) that operational emissions would decrease over the course of the Project's lifetime.

As shown below in **Table 7**, the Project's maximum daily emissions – even under the 2024 scenario – would not exceed SCAQMD's regional significance thresholds NO_x, CO, PM₁₀, and PM_{2.5} or LSTs for NO_x, CO, PM₁₀, and PM_{2.5}. The only potential exceedance shown is for regional VOC emissions during the 2024 scenario, but, as explained earlier, the 2024 buildout scenario is a hypothetical scenario with no potential to occur because full buildout could not be achieved by 2024. If buildout occurs by 2030 (a conservative assumption), declines in VOC emissions from vehicle fleets would ensure that the Project's VOC emissions are below the SCAQMD regional threshold for this pollutant. VOC emissions would continue to decline through 2040 due to ongoing reductions in VOC emissions from vehicle fleets. This decline also highlights the second point, which is that emissions associated with the Project – especially VOC, NO_x, and CO emissions – would decline over time primarily due to declining emissions from the mobile source sector, which can be attributed to factors such as the increasing penetration of newer vehicles with better efficiency and exhaust emission control systems in the statewide fleet, and the increasing share of electric vehicles (EVs) within the statewide fleet. Declines in area and energy-related emissions would also be expected to occur as the State transitions away from natural gas appliances and as electricity providers (such as Southern California Edison) transition to 100 percent clean energy, but the effect of these transitions is not accounted for in the CalEEMod criteria pollutant analysis. Given these considerations, the Project's emissions of criteria pollutants, including VOC, would be below SCAQMD regional thresholds and LSTs and therefore **less than significant**.

**Table 7
Regional and Localized Operational Emissions**

Emissions Source	Emissions in lbs per day					
	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Full Buildout – 2024						
Mobile	38.6	37.3	385	0.88	78.7	20.4
Area	19.2	0.30	32.3	<0.01	0.04	0.03
Energy	0.14	2.58	1.81	0.02	0.20	0.20
Total Regional Emissions: ^A	58.0	39.9	419	0.90	79.0	20.6
Full Buildout – 2030						
Mobile	29.3	24.2	289	0.78	78.5	20.2
Area	19.1	0.29	32.5	<0.01	0.04	0.03
Energy	0.14	2.58	1.81	0.02	0.20	0.20
Total Regional Emissions: ^A	48.6	26.8	323	0.79	78.7	20.4
Full Buildout - 2040						
Mobile	22.6	16.4	232	0.69	78.2	20.0
Area	19.1	0.29	32.5	<0.01	0.03	0.03
Energy	0.14	2.58	1.81	0.02	0.20	0.20
Total Regional Emissions: ^A	41.9	19.0	266	0.70	78.4	20.2
Maximum Regional Emissions	58.0^B	39.9	419	0.90	79.0	20.6
Regional Daily Thresholds	55	55	550	150	150	55
Exceed Thresholds?	No^B	No	No	No	No	No
Localized Emissions						
Full Buildout – 2024	19.34	2.88	34.11	0.02	0.24	0.23

Full Buildout – 2030	19.24	2.87	34.31	0.02	0.24	0.23
Full Buildout – 2040	19.24	2.87	34.31	0.02	0.23	0.23
Maximum Localized Emissions	19.34	2.88	34.31	0.02	0.24	0.23
Localized Significant Thresholds	-	91	664	-	1	1
Exceed Threshold?	-	No	No	-	No	No
<p><i>Note:</i></p> <p>^A Some emissions may not add up due to rounding and differences between summer and winter emissions.</p> <p>^B See discussion regarding VOC emissions. The 2024 full buildout scenario represents a hypothetical scenario. VOC emissions resultant from Project operations would be below SCAQMD thresholds.</p> <p>Source: NTEC, 2023.</p>						

5.2.3 Criteria Pollutant Emissions Summary – Health Impact

As shown, the Project's construction and operations emissions would not exceed applicable SCAQMD regional thresholds and LSTs. And as discussed earlier, these SCAQMD thresholds represent the maximum emissions that would not be expected to cause or materially contribute to an exceedance of NAAQS or CAAQS, which themselves represent the maximum concentrations of criteria pollutants that can be present in outdoor air without any harmful effects on people or the environment. Therefore, neither the Project's construction nor operations emissions of criteria pollutants would be expected to cause or measurably contribute to adverse health impacts, and the Project's construction and operations criteria pollutant emissions impacts on regional and localized air quality would be **less than significant**.

Emissions and health impacts due to non-criteria pollutants such as TACs are discussed in the following section.

5.3 Threshold c):

Would the project expose sensitive receptors to substantial pollutant concentrations?

5.3.1 Construction Emissions

As discussed previously, the Project's construction-related criteria pollutant emissions would not exceed SCAQMD regional significance thresholds. Construction-related criteria pollutant emissions also would not exceed SCAQMD LSTs, meaning that nearby sensitive receptors generally located within 25 meters or farther from construction sites would not be exposed to substantial criteria pollutant concentrations that would present a public health concern.

The primary TAC that would be generated by construction activities is diesel PM, which would be emitted from the exhaust pipes of diesel-powered construction vehicles and equipment. Construction activities emitting diesel PM would occur intermittently over the approximately 25-year buildout period associated with the Specific Plan. Further, development projects would be

scattered throughout the 43.8-acre Specific Plan area and not consistently located adjacent to or near a specific sensitive receptor.¹⁵ Thus, the previously identified sensitive receptors would only be exposed to construction-related DPM emissions for a fraction of the approximately 25-year buildout period. Because individual cancer risk is based on exposure to concentrations of TACs over a 30-year period, the likelihood that exposure of individuals to TAC concentrations resultant from the Project's intermittent construction activities would result in significant cancer risks is low. Further, as shown earlier, the maximum daily PM emissions associated with the Project's construction activities, which include exhaust PM, would not exceed applicable regional thresholds and LSTs.¹⁶ Given these considerations, construction-related TAC emissions are expected to result in **less than significant** health risk impacts.

5.3.2 Operations Emissions

As discussed previously, the Project's operational criteria pollutant emissions would not exceed SCAQMD regional significance thresholds or LSTs.

The Project does not propose sources of acutely and chronically hazardous TACs, such as industrial manufacturing processes, automotive repair facilities, or warehouse distribution facilities. Neither CARB nor the SCAQMD identify the types of retail, commercial, office, and residential uses proposed by the Project as sources of substantial TAC emissions. As a result, the operations of these uses would not warrant the need for a health risk assessment, and this TAC-related impact would be **less than significant**.

Regarding CO Hotspots: though the Project would generate traffic that produces and contributes to off-site CO emissions, Project traffic generation would not result in exceedances of CO air quality standards at nearby roadways due to three key factors. First, CO hotspots are rare and only occur in the presence of unusual atmospheric conditions and extremely cold conditions, neither of which applies to the Project area. Second, auto-related emissions of CO continue to decline because of advances in fuel combustion technology and the increasing penetration of this technology in the vehicle fleet. As shown earlier in **Table 2**, CO levels in the Project area are well-below federal and state standards, as are CO levels in the air basin itself. No exceedances of CO have been recorded at nearby monitoring stations for some time, and the air basin is currently designated as a CO attainment area for both CAAQS and NAAQS. Finally, the Project would not contribute to the levels of congestion and emissions necessary to trigger a potential CO hotspot. Therefore, the Project's potential to expose sensitive receptors to substantial CO concentrations as a result of CO hotspots would be **less than significant**.

¹⁵ For example, one project may be located within 100 feet of a sensitive receptor, and another project may be located 1,000 feet from that same sensitive receptor.

¹⁶ It is additionally worth reiterating the conservative nature of that analysis, which assumes that 10 percent of Project buildout would be constructed at once, and that every construction phase associated with buildout would occur simultaneously. Thus, the PM emissions estimated by that analysis can be considered conservative, worst-case estimates.

5.4 Threshold d):

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

Land uses associated with odor complaints include agricultural operations, wastewater treatment plants, landfills, food processing facilities, and certain industrial operations (such as manufacturing uses that produce chemicals, paper, etc.). The Project does not involve such land uses. Therefore, the Project's potential to result in objectionable odors adversely affecting a substantial number of people would be **less than significant**.

Air Quality and Greenhouse Gases Appendix

El Segundo Downtown Specific Plan Update Project

Downtown SP Update - Construction Only (Summer) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Construction Only (Summer)
Construction Start Date	7/1/2024
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92134258270639, -118.41595830576219
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	13.0	1000sqft	0.30	13,000	0.00	—	—	—

General Office Building	20.0	1000sqft	0.46	20,000	0.00	—	—	—
Medical Office Building	2.40	1000sqft	0.06	2,400	0.00	—	—	—
Apartments Mid Rise	30.0	Dwelling Unit	0.79	28,800	0.00	—	89.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.74	27.6	52.6	56.9	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,692	13,692	0.60	0.86	15.4	13,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	1.29	9.98	12.4	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,533	2,533	0.10	0.07	0.07	2,556
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	2.10	6.13	6.99	0.01	0.24	0.51	0.75	0.22	0.14	0.36	—	1,573	1,573	0.07	0.07	0.74	1,598
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.38	1.12	1.28	< 0.005	0.04	0.09	0.14	0.04	0.03	0.07	—	260	260	0.01	0.01	0.12	265

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.74	27.6	52.6	56.9	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,692	13,692	0.60	0.86	15.4	13,977
2025	1.46	1.22	9.41	12.5	0.02	0.33	0.51	0.84	0.30	0.12	0.43	—	2,542	2,542	0.10	0.07	2.45	2,568
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.55	1.29	9.98	12.4	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,533	2,533	0.10	0.07	0.07	2,556
2025	1.46	1.21	9.44	12.1	0.02	0.33	0.51	0.84	0.30	0.12	0.43	—	2,519	2,519	0.10	0.07	0.06	2,543
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.86	2.10	6.13	6.99	0.01	0.24	0.51	0.75	0.22	0.14	0.36	—	1,573	1,573	0.07	0.07	0.74	1,598
2025	0.27	0.22	1.74	2.25	< 0.005	0.06	0.09	0.15	0.06	0.02	0.08	—	464	464	0.02	0.01	0.19	469
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.16	0.38	1.12	1.28	< 0.005	0.04	0.09	0.14	0.04	0.03	0.07	—	260	260	0.01	0.01	0.12	265
2025	0.05	0.04	0.32	0.41	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.01	—	76.9	76.9	< 0.005	< 0.005	0.03	77.7

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	1.83	1.83	—	0.28	0.28	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.98	1.01	< 0.005	0.04	—	0.04	0.04	—	0.04	—	157	157	0.01	< 0.005	—	158
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.94	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.70	179
Vendor	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	0.00
Hauling	0.30	0.08	5.21	1.84	0.03	0.06	1.19	1.25	0.06	0.33	0.38	—	4,475	4,475	0.22	0.72	10.4	4,705

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	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	0.00
Hauling	0.02	< 0.005	0.35	0.11	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	282	282	0.01	0.05	0.28	296
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	49.0

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.00	0.97	< 0.005	0.05	—	0.05	0.04	—	0.04	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.75	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	141	141	0.01	< 0.005	0.56	143
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.56	8.56	< 0.005	< 0.005	0.02	8.68
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	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	0.00
Hauling	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	0.00

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.40	3.64	0.01	0.13	—	0.13	0.12	—	0.12	—	649	649	0.03	0.01	—	651
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.07	0.62	0.66	< 0.005	0.02	—	0.02	0.02	—	0.02	—	107	107	< 0.005	< 0.005	—	108
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.16	2.48	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	465	465	0.02	0.02	1.83	472
Vendor	0.02	0.01	0.34	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.79	304
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.19	2.10	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	441	441	0.02	0.02	0.05	446
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.02	303
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.80	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	0.01	0.01	0.28	163
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	105	105	< 0.005	0.01	0.12	109
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.7	26.7	< 0.005	< 0.005	0.05	27.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	18.1
Hauling	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	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.65	1.85	< 0.005	0.06	—	0.06	0.06	—	0.06	—	331	331	0.01	< 0.005	—	332
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.9	54.9	< 0.005	< 0.005	—	55.0
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.14	2.29	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	455	455	0.02	0.02	1.67	462
Vendor	0.02	0.01	0.32	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	286	286	0.01	0.04	0.78	299
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	1.94	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	432	432	0.02	0.02	0.04	437
Vendor	0.02	0.01	0.34	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	286	286	0.01	0.04	0.02	298
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.6	80.6	< 0.005	< 0.005	0.13	81.6
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	52.6	52.6	< 0.005	0.01	0.06	54.9
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.71	8.71	< 0.005	< 0.005	0.01	9.09
Hauling	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	0.00

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.63	0.53	4.90	6.53	0.01	0.23	—	0.23	0.21	—	0.21	—	992	992	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.50	4.50	< 0.005	< 0.005	—	4.51
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.94	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.70	179
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	0.01	4.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.78
Vendor	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	0.00
Hauling	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	0.00

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	22.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Architect ural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.39	1.39	< 0.005	< 0.005	—	1.40
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.50	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.0	93.0	< 0.005	< 0.005	0.37	94.4
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	7/1/2024	7/31/2024	5.00	23.0	—
Grading	Grading	7/1/2024	7/31/2024	5.00	23.0	—
Building Construction	Building Construction	7/1/2024	4/4/2025	5.00	200	—
Paving	Paving	7/1/2024	7/12/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	7/1/2024	7/31/2024	5.00	23.0	—

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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	32.1	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	32.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	9.01	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.59	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	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%
Sweep paved roads once per month	9%	9%

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	58,320	19,440	53,100	17,700	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	64,200	—
Grading	—	—	23.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

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

Land Use	Area Paved (acres)	% Asphalt
Strip Mall	0.00	0%
General Office Building	0.00	0%
Medical Office Building	0.00	0%
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6

Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00
Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096

Employed	92.6344155
Median HI	71.46156807
Education	—
Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0

Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4

Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
Construction: Construction Phases	See Note A.1
Construction: Trips and VMT	See Note A.2

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Construction Only (Winter)
Construction Start Date	1/1/2024
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92134258270639, -118.41595830576219
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	13.0	1000sqft	0.30	13,000	0.00	—	—	—

General Office Building	20.0	1000sqft	0.46	20,000	0.00	—	—	—
Medical Office Building	2.40	1000sqft	0.06	2,400	0.00	—	—	—
Apartments Mid Rise	30.0	Dwelling Unit	0.79	28,800	0.00	—	89.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	1.29	9.94	12.8	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,557	2,557	0.10	0.07	2.62	2,583
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.73	27.6	52.9	56.0	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,638	13,638	0.60	0.86	0.40	13,909
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.15	2.34	8.00	9.33	0.02	0.31	0.61	0.92	0.28	0.17	0.45	—	2,050	2,050	0.09	0.09	0.95	2,079
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21	0.43	1.46	1.70	< 0.005	0.06	0.11	0.17	0.05	0.03	0.08	—	339	339	0.01	0.01	0.16	344

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.55	1.29	9.94	12.8	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,557	2,557	0.10	0.07	2.62	2,583
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.73	27.6	52.9	56.0	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,638	13,638	0.60	0.86	0.40	13,909
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.15	2.34	8.00	9.33	0.02	0.31	0.61	0.92	0.28	0.17	0.45	—	2,050	2,050	0.09	0.09	0.95	2,079
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.21	0.43	1.46	1.70	< 0.005	0.06	0.11	0.17	0.05	0.03	0.08	—	339	339	0.01	0.01	0.16	344

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502

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Demolition	—	—	—	—	—	—	1.83	1.83	—	0.28	0.28	—	—	—	—	—	—	
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	0.12	0.10	0.98	1.01	< 0.005	0.04	—	0.04	0.04	—	0.04	—	157	157	0.01	< 0.005	—	158
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	
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	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.06	0.06	0.07	0.80	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	0.01	0.01	0.02	169
Vendor	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	
Hauling	0.30	0.08	5.41	1.82	0.03	0.06	1.19	1.25	0.06	0.33	0.38	—	4,476	4,476	0.22	0.72	0.27	4,696
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	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	

Hauling	0.02	< 0.005	0.35	0.11	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	282	282	0.01	0.05	0.28	296
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	49.0

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.00	0.97	< 0.005	0.05	—	0.05	0.04	—	0.04	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—

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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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7	
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—	
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	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.06	0.64	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	< 0.005	0.01	135	
Vendor	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	0.00	
Hauling	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	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.56	8.56	< 0.005	< 0.005	0.02	8.68	
Vendor	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	0.00	
Hauling	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	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44	
Vendor	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	0.00	
Hauling	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	0.00	

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.62	5.17	5.54	0.01	0.20	—	0.20	0.19	—	0.19	—	987	987	0.04	0.01	—	990
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.94	1.01	< 0.005	0.04	—	0.04	0.03	—	0.03	—	163	163	0.01	< 0.005	—	164
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.16	2.48	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	465	465	0.02	0.02	1.83	472
Vendor	0.02	0.01	0.34	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.79	304
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.19	2.10	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	441	441	0.02	0.02	0.05	446
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.02	303
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.21	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	245	245	0.01	0.01	0.43	248
Vendor	0.01	< 0.005	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	159	159	0.01	0.02	0.19	166
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.6	40.6	< 0.005	< 0.005	0.07	41.1
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.4	26.4	< 0.005	< 0.005	0.03	27.5
Hauling	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	0.00

3.7. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.90	6.53	0.01	0.23	—	0.23	0.21	—	0.21	—	992	992	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.50	4.50	< 0.005	< 0.005	—	4.51
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.80	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	0.01	0.01	0.02	169
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	0.01	4.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.78
Vendor	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	0.00
Hauling	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	0.00

3.9. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	22.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Architect ural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.39	1.39	< 0.005	< 0.005	—	1.40	
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
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	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.03	0.03	0.04	0.42	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.1	88.1	< 0.005	< 0.005	0.01	89.2	
Vendor	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	0.00	
Hauling	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	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.71	
Vendor	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	0.00	
Hauling	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	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95	
Vendor	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	0.00	
Hauling	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	0.00	

4. Operations Emissions Details

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	TOG	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	TOG	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	TOG	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	1/1/2024	1/31/2024	5.00	23.0	—
Grading	Grading	1/1/2024	1/31/2024	5.00	23.0	—
Building Construction	Building Construction	1/1/2024	10/4/2024	5.00	200	—
Paving	Paving	1/1/2024	1/12/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	1/1/2024	1/31/2024	5.00	23.0	—

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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	32.1	40.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	32.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	9.01	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.59	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	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%
Sweep paved roads once per month	9%	9%

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	58,320	19,440	53,100	17,700	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	64,200	—
Grading	—	—	23.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

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

Land Use	Area Paved (acres)	% Asphalt
Strip Mall	0.00	0%
General Office Building	0.00	0%
Medical Office Building	0.00	0%

Apartments Mid Rise	—	0%
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5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005

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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6

Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00
Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096

Employed	92.6344155
Median HI	71.46156807
Education	—
Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0

Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4

Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
Construction: Construction Phases	See Note A.1
Construction: Trips and VMT	See Note A.2

Downtown SP Update - Operations (2024) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Operations (2024)
Operational Year	2024
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92112919374658, -118.41555573938703
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	130	1000sqft	2.98	130,000	0.00	—	—	—

General Office Building	200	1000sqft	4.59	200,000	0.00	—	—	—
Medical Office Building	24.0	1000sqft	0.55	24,000	0.00	—	—	—
Apartments Mid Rise	300	Dwelling Unit	7.89	288,000	0.00	—	888	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	47.8	58.0	36.8	419	0.90	0.81	78.1	79.0	0.76	19.8	20.6	547	99,642	100,189	60.0	3.79	360	103,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	42.8	53.3	39.9	352	0.86	0.78	78.1	78.9	0.74	19.8	20.6	547	95,698	96,245	60.1	3.97	13.2	98,946
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.4	51.2	35.9	340	0.76	0.73	67.8	68.5	0.69	17.2	17.9	547	86,092	86,639	59.6	3.54	139	89,323
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.38	9.35	6.55	62.0	0.14	0.13	12.4	12.5	0.13	3.14	3.27	90.5	14,254	14,344	9.87	0.59	23.0	14,789

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	43.1	38.6	34.0	385	0.88	0.58	78.1	78.7	0.54	19.8	20.4	—	89,927	89,927	4.14	3.43	356	91,409
Area	4.38	19.2	0.30	32.3	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	9,220	9,220	0.85	0.08	—	9,264
Water	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	47.8	58.0	36.8	419	0.90	0.81	78.1	79.0	0.76	19.8	20.6	547	99,642	100,189	60.0	3.79	360	103,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	42.6	38.1	37.3	350	0.84	0.58	78.1	78.7	0.54	19.8	20.4	—	86,093	86,093	4.30	3.62	9.23	87,287
Area	0.00	15.1	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
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	9,220	9,220	0.85	0.08	—	9,264
Water	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	42.8	53.3	39.9	352	0.86	0.78	78.1	78.9	0.74	19.8	20.6	547	95,698	96,245	60.1	3.97	13.2	98,946
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	37.1	33.2	33.1	316	0.75	0.51	67.8	68.3	0.47	17.2	17.7	—	76,412	76,412	3.75	3.19	135	77,590
Area	3.00	17.9	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	74.5	74.5	< 0.005	< 0.005	—	74.8
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	9,220	9,220	0.85	0.08	—	9,264
Water	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	40.4	51.2	35.9	340	0.76	0.73	67.8	68.5	0.69	17.2	17.9	547	86,092	86,639	59.6	3.54	139	89,323
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.78	6.05	6.04	57.7	0.14	0.09	12.4	12.5	0.09	3.14	3.23	—	12,651	12,651	0.62	0.53	22.3	12,846
Area	0.55	3.27	0.04	4.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4
Energy	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,526	1,526	0.14	0.01	—	1,534
Water	—	—	—	—	—	—	—	—	—	—	—	18.8	63.9	82.7	1.94	0.05	—	145
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66
Total	7.38	9.35	6.55	62.0	0.14	0.13	12.4	12.5	0.13	3.14	3.27	90.5	14,254	14,344	9.87	0.59	23.0	14,789

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	24.5	21.9	19.4	220	0.50	0.33	44.7	45.0	0.31	11.3	11.7	—	51,401	51,401	2.36	1.96	203	52,247
General Office Building	8.27	7.41	6.55	74.3	0.17	0.11	15.1	15.2	0.10	3.84	3.94	—	17,379	17,379	0.80	0.66	68.8	17,665
Medical Office Building	3.55	3.18	2.81	31.9	0.07	0.05	6.48	6.52	0.04	1.64	1.69	—	7,451	7,451	0.34	0.28	29.5	7,574

Apartments	6.80	6.11	5.23	59.1	0.13	0.09	11.9	12.0	0.08	3.02	3.10	—	13,696	13,696	0.64	0.53	54.1	13,923
Total	43.1	38.6	34.0	385	0.88	0.58	78.1	78.7	0.54	19.8	20.4	—	89,927	89,927	4.14	3.43	356	91,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	24.2	21.6	21.3	200	0.48	0.33	44.7	45.0	0.31	11.3	11.7	—	49,209	49,209	2.45	2.06	5.28	49,890
General Office Building	8.17	7.30	7.19	67.5	0.16	0.11	15.1	15.2	0.10	3.84	3.94	—	16,638	16,638	0.83	0.70	1.78	16,868
Medical Office Building	3.50	3.13	3.08	28.9	0.07	0.05	6.48	6.52	0.04	1.64	1.69	—	7,133	7,133	0.35	0.30	0.76	7,232
Apartments Mid Rise	6.71	6.02	5.74	53.8	0.13	0.09	11.9	12.0	0.08	3.02	3.10	—	13,113	13,113	0.67	0.56	1.40	13,297
Total	42.6	38.1	37.3	350	0.84	0.58	78.1	78.7	0.54	19.8	20.4	—	86,093	86,093	4.30	3.62	9.23	87,287
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	4.01	3.59	3.60	34.4	0.08	0.06	7.38	7.44	0.05	1.87	1.93	—	7,549	7,549	0.37	0.31	13.3	7,666
General Office Building	1.12	1.00	1.01	9.60	0.02	0.02	2.06	2.08	0.01	0.52	0.54	—	2,110	2,110	0.10	0.09	3.72	2,143
Medical Office Building	0.48	0.43	0.43	4.11	0.01	0.01	0.88	0.89	0.01	0.22	0.23	—	903	903	0.04	0.04	1.59	917
Apartments Mid Rise	1.16	1.04	1.01	9.61	0.02	0.02	2.04	2.05	0.01	0.52	0.53	—	2,089	2,089	0.10	0.09	3.68	2,121
Total	6.78	6.05	6.04	57.7	0.14	0.09	12.4	12.5	0.09	3.14	3.23	—	12,651	12,651	0.62	0.53	22.3	12,846

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	1,220	1,220	0.12	0.01	—	1,227
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,404	3,404	0.32	0.04	—	3,424
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	409	409	0.04	< 0.005	—	411
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,050	1,050	0.10	0.01	—	1,057
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,083	6,083	0.58	0.07	—	6,118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	1,220	1,220	0.12	0.01	—	1,227
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,404	3,404	0.32	0.04	—	3,424
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	409	409	0.04	< 0.005	—	411
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,050	1,050	0.10	0.01	—	1,057
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,083	6,083	0.58	0.07	—	6,118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	202	202	0.02	< 0.005	—	203

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	564	564	0.05	0.01	—	567
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	67.6	67.6	0.01	< 0.005	—	68.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	174	174	0.02	< 0.005	—	175
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,007	1,007	0.10	0.01	—	1,013

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250
General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250

General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.3	41.3	< 0.005	< 0.005	—	41.4
General Office Building	0.03	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	270
Medical Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.3	32.3	< 0.005	< 0.005	—	32.4
Apartments Mid Rise	0.02	0.01	0.15	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.02	< 0.005	—	177
Total	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	519	519	0.05	< 0.005	—	521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.38	4.08	0.30	32.3	< 0.005	0.04	—	0.04	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Total	4.38	19.2	0.30	32.3	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	15.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.55	0.51	0.04	4.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Total	0.55	3.27	0.04	4.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	62.6	81.1	1.90	0.05	—	142
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	231	299	7.01	0.17	—	525
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	19.6	25.4	0.59	0.01	—	44.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	72.7	94.1	2.20	0.05	—	165
Total	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	62.6	81.1	1.90	0.05	—	142
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	231	299	7.01	0.17	—	525
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	19.6	25.4	0.59	0.01	—	44.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	72.7	94.1	2.20	0.05	—	165
Total	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	3.05	10.4	13.4	0.31	0.01	—	23.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	38.3	49.5	1.16	0.03	—	86.9
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.96	3.24	4.20	0.10	< 0.005	—	7.36
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.55	12.0	15.6	0.36	0.01	—	27.3
Total	—	—	—	—	—	—	—	—	—	—	—	18.8	63.9	82.7	1.94	0.05	—	145

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.6	0.00	16.6	1.66	0.00	—	58.1
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	23.1	0.00	23.1	2.31	0.00	—	80.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66

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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Strip Mall	5,762	5,465	2,656	1,925,589	63,010	59,768	29,045	21,058,532
General Office Building	1,948	442	140	538,219	21,304	4,834	1,531	5,886,040
Medical Office Building	835	206	34.1	230,250	9,134	2,249	373	2,518,053
Apartments Mid Rise	1,632	1,473	1,227	566,271	16,767	15,134	12,606	5,817,883

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
583200	194,400	531,000	177,000	—

5.10.3. Landscape Equipment

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)
Strip Mall	1,276,778	349	0.0330	0.0040	778,303
General Office Building	3,564,057	349	0.0330	0.0040	5,069,293
Medical Office Building	427,687	349	0.0330	0.0040	608,315
Apartments Mid Rise	1,099,750	349	0.0330	0.0040	3,332,053

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	9,629,428	0.00
General Office Building	35,546,750	0.00
Medical Office Building	3,011,533	0.00
Apartments Mid Rise	11,182,140	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	137	—
General Office Building	186	—
Medical Office Building	259	—
Apartments Mid Rise	222	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6
Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00

Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096
Employed	92.6344155
Median HI	71.46156807
Education	—

Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0
Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4
Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
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Operations: Hearths

See Note A.3

Downtown SP Update - Operations (2030) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Operations (2030)
Operational Year	2030
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92112919374658, -118.41555573938703
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	130	1000sqft	2.98	130,000	0.00	—	—	—

General Office Building	200	1000sqft	4.59	200,000	0.00	—	—	—
Medical Office Building	24.0	1000sqft	0.55	24,000	0.00	—	—	—
Apartments Mid Rise	300	Dwelling Unit	7.89	288,000	0.00	—	888	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.2	48.6	25.0	323	0.79	0.65	78.1	78.7	0.62	19.8	20.4	547	87,363	87,910	59.1	3.16	182	90,509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.7	44.3	26.8	264	0.76	0.62	78.1	78.7	0.59	19.8	20.4	547	83,896	84,442	59.2	3.30	8.60	86,912
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.4	43.3	24.2	261	0.68	0.59	67.7	68.3	0.56	17.2	17.7	547	75,427	75,974	58.7	2.94	71.5	78,391
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.74	7.89	4.42	47.6	0.12	0.11	12.4	12.5	0.10	3.14	3.24	90.5	12,488	12,578	9.72	0.49	11.8	12,979

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.7	29.3	22.1	289	0.78	0.42	78.1	78.5	0.39	19.8	20.2	—	79,278	79,278	3.21	2.80	178	80,371
Area	4.30	19.1	0.29	32.5	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	37.2	48.6	25.0	323	0.79	0.65	78.1	78.7	0.62	19.8	20.4	547	87,363	87,910	59.1	3.16	182	90,509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.4	29.0	24.2	262	0.74	0.42	78.1	78.5	0.39	19.8	20.2	—	75,920	75,920	3.32	2.94	4.62	76,883
Area	0.00	15.1	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
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	32.7	44.3	26.8	264	0.76	0.62	78.1	78.7	0.59	19.8	20.4	547	83,896	84,442	59.2	3.30	8.60	86,912
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	28.2	25.2	21.5	237	0.66	0.37	67.7	68.1	0.34	17.2	17.5	—	67,377	67,377	2.89	2.59	67.5	68,288
Area	2.94	17.9	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	74.5	74.5	< 0.005	< 0.005	—	74.8
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	31.4	43.3	24.2	261	0.68	0.59	67.7	68.3	0.56	17.2	17.7	547	75,427	75,974	58.7	2.94	71.5	78,391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.15	4.61	3.92	43.2	0.12	0.07	12.4	12.4	0.06	3.14	3.20	—	11,155	11,155	0.48	0.43	11.2	11,306
Area	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4
Energy	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,273	1,273	0.14	0.01	—	1,280
Water	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66
Total	5.74	7.89	4.42	47.6	0.12	0.11	12.4	12.5	0.10	3.14	3.24	90.5	12,488	12,578	9.72	0.49	11.8	12,979

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	18.5	16.6	12.6	165	0.44	0.24	44.6	44.9	0.22	11.3	11.6	—	45,315	45,315	1.83	1.60	102	45,938
General Office Building	6.27	5.62	4.27	55.7	0.15	0.08	15.1	15.2	0.08	3.83	3.91	—	15,321	15,321	0.62	0.54	34.5	15,532
Medical Office Building	2.69	2.41	1.83	23.9	0.06	0.03	6.47	6.50	0.03	1.64	1.67	—	6,569	6,569	0.27	0.23	14.8	6,659

Apartments	5.15	4.64	3.42	44.3	0.12	0.06	11.9	11.9	0.06	3.02	3.07	—	12,074	12,074	0.50	0.43	27.1	12,242
Total	32.7	29.3	22.1	289	0.78	0.42	78.1	78.5	0.39	19.8	20.2	—	79,278	79,278	3.21	2.80	178	80,371
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	18.4	16.4	13.8	150	0.42	0.24	44.6	44.9	0.22	11.3	11.6	—	43,394	43,394	1.89	1.68	2.64	43,944
General Office Building	6.22	5.56	4.67	50.6	0.14	0.08	15.1	15.2	0.08	3.83	3.91	—	14,672	14,672	0.64	0.57	0.89	14,857
Medical Office Building	2.67	2.38	2.00	21.7	0.06	0.03	6.47	6.50	0.03	1.64	1.67	—	6,290	6,290	0.27	0.24	0.38	6,370
Apartments Mid Rise	5.11	4.59	3.74	40.4	0.11	0.06	11.9	11.9	0.06	3.02	3.07	—	11,563	11,563	0.51	0.45	0.70	11,712
Total	32.4	29.0	24.2	262	0.74	0.42	78.1	78.5	0.39	19.8	20.2	—	75,920	75,920	3.32	2.94	4.62	76,883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	3.05	2.73	2.33	25.8	0.07	0.04	7.37	7.41	0.04	1.87	1.91	—	6,657	6,657	0.28	0.26	6.67	6,747
General Office Building	0.85	0.76	0.65	7.20	0.02	0.01	2.06	2.07	0.01	0.52	0.53	—	1,861	1,861	0.08	0.07	1.87	1,886
Medical Office Building	0.36	0.33	0.28	3.08	0.01	< 0.005	0.88	0.89	< 0.005	0.22	0.23	—	796	796	0.03	0.03	0.80	807
Apartments Mid Rise	0.88	0.79	0.65	7.21	0.02	0.01	2.04	2.05	0.01	0.52	0.53	—	1,842	1,842	0.08	0.07	1.84	1,867
Total	5.15	4.61	3.92	43.2	0.12	0.07	12.4	12.4	0.06	3.14	3.20	—	11,155	11,155	0.48	0.43	11.2	11,306

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	151	151	0.02	< 0.005	—	152

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	422	422	0.05	0.01	—	425
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	50.6	50.6	0.01	< 0.005	—	51.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	130	130	0.02	< 0.005	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	—	753	753	0.10	0.01	—	759

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250
General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250

General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.3	41.3	< 0.005	< 0.005	—	41.4
General Office Building	0.03	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	270
Medical Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.3	32.3	< 0.005	< 0.005	—	32.4
Apartments Mid Rise	0.02	0.01	0.15	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.02	< 0.005	—	177
Total	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	519	519	0.05	< 0.005	—	521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.30	4.00	0.29	32.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Total	4.30	19.1	0.29	32.5	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	15.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.50	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Total	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	3.05	7.75	10.8	0.31	0.01	—	20.9
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	28.6	39.9	1.16	0.03	—	77.2
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.96	2.43	3.38	0.10	< 0.005	—	6.54
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.55	9.00	12.6	0.36	0.01	—	24.3
Total	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.6	0.00	16.6	1.66	0.00	—	58.1
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	23.1	0.00	23.1	2.31	0.00	—	80.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251

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	TOG	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66

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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Strip Mall	5,762	5,465	2,656	1,925,589	63,010	59,768	29,045	21,058,532
General Office Building	1,948	442	140	538,219	21,304	4,834	1,531	5,886,040
Medical Office Building	835	206	34.1	230,250	9,134	2,249	373	2,518,053
Apartments Mid Rise	1,632	1,473	1,227	566,271	16,767	15,134	12,606	5,817,883

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
583200	194,400	531,000	177,000	—

5.10.3. Landscape Equipment

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)
Strip Mall	1,276,778	261	0.0330	0.0040	778,303
General Office Building	3,564,057	261	0.0330	0.0040	5,069,293
Medical Office Building	427,687	261	0.0330	0.0040	608,315
Apartments Mid Rise	1,099,750	261	0.0330	0.0040	3,332,053

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	9,629,428	0.00
General Office Building	35,546,750	0.00
Medical Office Building	3,011,533	0.00
Apartments Mid Rise	11,182,140	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	137	—
General Office Building	186	—
Medical Office Building	259	—
Apartments Mid Rise	222	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6
Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00

Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096
Employed	92.6344155
Median HI	71.46156807
Education	—

Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0
Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4
Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
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Operations: Hearths

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Downtown SP Update - Operations (2040) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Operations (2040)
Operational Year	2040
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92112919374658, -118.41555573938703
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	130	1000sqft	2.98	130,000	0.00	—	—	—

General Office Building	200	1000sqft	4.59	200,000	0.00	—	—	—
Medical Office Building	24.0	1000sqft	0.55	24,000	0.00	—	—	—
Apartments Mid Rise	300	Dwelling Unit	7.89	288,000	0.00	—	888	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.6	41.9	17.8	266	0.70	0.50	77.9	78.4	0.47	19.8	20.2	547	78,094	78,640	58.1	2.57	40.8	80,900
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.2	37.8	19.0	212	0.67	0.46	77.9	78.4	0.44	19.8	20.2	547	74,931	75,478	58.1	2.68	4.93	77,736
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.9	37.6	17.3	214	0.60	0.45	67.6	68.0	0.43	17.1	17.6	547	67,492	68,039	57.8	2.41	17.9	70,220
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.55	6.87	3.15	39.0	0.11	0.08	12.3	12.4	0.08	3.13	3.21	90.5	11,174	11,265	9.58	0.40	2.97	11,626

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	25.0	22.6	15.0	232	0.69	0.26	77.9	78.2	0.24	19.8	20.0	—	70,009	70,009	2.24	2.21	36.8	70,762
Area	4.30	19.1	0.29	32.5	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	29.6	41.9	17.8	266	0.70	0.50	77.9	78.4	0.47	19.8	20.2	547	78,094	78,640	58.1	2.57	40.8	80,900
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	24.9	22.6	16.4	210	0.66	0.26	77.9	78.2	0.24	19.8	20.0	—	66,955	66,955	2.30	2.33	0.96	67,707
Area	0.00	15.1	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
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	25.2	37.8	19.0	212	0.67	0.46	77.9	78.4	0.44	19.8	20.2	547	74,931	75,478	58.1	2.68	4.93	77,736
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.7	19.6	14.5	190	0.58	0.23	67.6	67.8	0.21	17.1	17.4	—	59,442	59,442	2.01	2.05	14.0	60,117
Area	2.95	17.9	0.20	22.3	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	74.5	74.5	< 0.005	< 0.005	—	74.8
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	24.9	37.6	17.3	214	0.60	0.45	67.6	68.0	0.43	17.1	17.6	547	67,492	68,039	57.8	2.41	17.9	70,220
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.96	3.58	2.65	34.6	0.11	0.04	12.3	12.4	0.04	3.13	3.17	—	9,841	9,841	0.33	0.34	2.31	9,953
Area	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4
Energy	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,273	1,273	0.14	0.01	—	1,280
Water	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66
Total	4.55	6.87	3.15	39.0	0.11	0.08	12.3	12.4	0.08	3.13	3.21	90.5	11,174	11,265	9.58	0.40	2.97	11,626

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	14.2	12.8	8.53	133	0.39	0.15	44.6	44.7	0.14	11.3	11.4	—	40,016	40,016	1.27	1.26	21.1	40,446
General Office Building	4.80	4.34	2.88	44.8	0.13	0.05	15.1	15.1	0.05	3.82	3.87	—	13,530	13,530	0.43	0.43	7.12	13,675
Medical Office Building	2.06	1.86	1.24	19.2	0.06	0.02	6.46	6.48	0.02	1.64	1.66	—	5,801	5,801	0.18	0.18	3.05	5,863

Apartments	3.94	3.58	2.32	35.6	0.10	0.04	11.9	11.9	0.04	3.01	3.05	—	10,663	10,663	0.35	0.34	5.60	10,779
Total	25.0	22.6	15.0	232	0.69	0.26	77.9	78.2	0.24	19.8	20.0	—	70,009	70,009	2.24	2.21	36.8	70,762
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	14.1	12.8	9.35	120	0.38	0.15	44.6	44.7	0.14	11.3	11.4	—	38,270	38,270	1.31	1.33	0.55	38,699
General Office Building	4.78	4.33	3.16	40.5	0.13	0.05	15.1	15.1	0.05	3.82	3.87	—	12,939	12,939	0.44	0.45	0.18	13,084
Medical Office Building	2.05	1.86	1.36	17.4	0.05	0.02	6.46	6.48	0.02	1.64	1.66	—	5,548	5,548	0.19	0.19	0.08	5,610
Apartments Mid Rise	3.93	3.57	2.54	32.3	0.10	0.04	11.9	11.9	0.04	3.01	3.05	—	10,198	10,198	0.36	0.36	0.15	10,314
Total	24.9	22.6	16.4	210	0.66	0.26	77.9	78.2	0.24	19.8	20.0	—	66,955	66,955	2.30	2.33	0.96	67,707
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	2.35	2.12	1.57	20.6	0.06	0.03	7.36	7.39	0.02	1.87	1.89	—	5,873	5,873	0.20	0.20	1.38	5,939
General Office Building	0.66	0.59	0.44	5.76	0.02	0.01	2.06	2.06	0.01	0.52	0.53	—	1,642	1,642	0.06	0.06	0.39	1,660
Medical Office Building	0.28	0.25	0.19	2.47	0.01	< 0.005	0.88	0.88	< 0.005	0.22	0.23	—	702	702	0.02	0.02	0.16	710
Apartments Mid Rise	0.68	0.61	0.44	5.77	0.02	0.01	2.03	2.04	0.01	0.52	0.52	—	1,625	1,625	0.06	0.06	0.38	1,643
Total	3.96	3.58	2.65	34.6	0.11	0.04	12.3	12.4	0.04	3.13	3.17	—	9,841	9,841	0.33	0.34	2.31	9,953

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	151	151	0.02	< 0.005	—	152

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	422	422	0.05	0.01	—	425
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	50.6	50.6	0.01	< 0.005	—	51.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	130	130	0.02	< 0.005	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	—	753	753	0.10	0.01	—	759

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250
General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250

General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.3	41.3	< 0.005	< 0.005	—	41.4
General Office Building	0.03	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	270
Medical Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.3	32.3	< 0.005	< 0.005	—	32.4
Apartments Mid Rise	0.02	0.01	0.15	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.02	< 0.005	—	177
Total	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	519	519	0.05	< 0.005	—	521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.30	4.01	0.29	32.5	< 0.005	0.03	—	0.03	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Total	4.30	19.1	0.29	32.5	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	15.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.50	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Total	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	3.05	7.75	10.8	0.31	0.01	—	20.9
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	28.6	39.9	1.16	0.03	—	77.2
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.96	2.43	3.38	0.10	< 0.005	—	6.54
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.55	9.00	12.6	0.36	0.01	—	24.3
Total	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.6	0.00	16.6	1.66	0.00	—	58.1
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	23.1	0.00	23.1	2.31	0.00	—	80.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66

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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Strip Mall	5,762	5,465	2,656	1,925,589	63,010	59,768	29,045	21,058,532
General Office Building	1,948	442	140	538,219	21,304	4,834	1,531	5,886,040
Medical Office Building	835	206	34.1	230,250	9,134	2,249	373	2,518,053
Apartments Mid Rise	1,632	1,473	1,227	566,271	16,767	15,134	12,606	5,817,883

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
583200	194,400	531,000	177,000	—

5.10.3. Landscape Equipment

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)
Strip Mall	1,276,778	261	0.0330	0.0040	778,303
General Office Building	3,564,057	261	0.0330	0.0040	5,069,293
Medical Office Building	427,687	261	0.0330	0.0040	608,315
Apartments Mid Rise	1,099,750	261	0.0330	0.0040	3,332,053

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	9,629,428	0.00
General Office Building	35,546,750	0.00
Medical Office Building	3,011,533	0.00
Apartments Mid Rise	11,182,140	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	137	—
General Office Building	186	—
Medical Office Building	259	—
Apartments Mid Rise	222	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6
Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00

Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096
Employed	92.6344155
Median HI	71.46156807
Education	—

Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0
Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4
Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
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Operations: Hearths

See Note A.3

Downtown Specific Plan Update

CalEEMod Notes

- Note A.1** Construction phases were modified to represent a scenario in which construction phases for the given land uses occur simultaneously. The demolition, grading, and architectural coatings phases were extended to one month to more realistically reflect the levels of demolition, grading, and coatings that would be required for construction of the given land uses, based on the consultant's experience.
- Note A.2** Haul trip lengths were conservatively increased to 40 miles (one way) to reflect a range of possible landfills or receiving locations, as they are not known at this time.
- Note A.3** Residential land uses would not contain hearths or woodstoves.

APPENDIX D: CULTURAL RESOURCES

APPENDIX D.1: HISTORICAL REPORT

DOWNTOWN SPECIFIC PLAN UPDATE

El Segundo, California



Historical Resource Technical Report

Prepared by:
Teresa Grimes | Historic Preservation
December 2023

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Appendix A – Résumé

Appendix B – List of Properties in Specific Plan Update Area

EXECUTIVE SUMMARY

The El Segundo Downtown Specific Plan (Specific Plan) update is a revision to an existing regulatory plan, which serves as zoning for properties within the boundaries of the Specific Plan. All proposed development plans or agreements, tentative or parcel maps, and any other development approvals must be consistent with this Specific Plan, the General Plan, and state and federal laws. The Specific Plan update area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo. The purpose of this report is to determine if historical resources as defined by the California Environmental Quality Act (CEQA) are present within the Specific Plan update area and, if so, to identify impacts that may occur to historical resources as a result of the Specific Plan.

This report determines that there are no properties listed under federal, state, or local landmark or historic district programs within the Specific Plan update area. Furthermore, there are not any properties in the area identified as significant pursuant to the criteria set forth in subdivision (g) of Section 5024.1 of the Public Resources Code. In the reconnaissance survey conducted for this report in 2021, four properties were identified as appearing to be individually eligible as historical resources and one group of properties on Richmond Street as appearing to be collectively eligible as a historic district. To provide a conservative analysis of Specific Plan impacts, these properties are being treated as discretionary historical resources for the purposes of this report.

This report finds that the adoption of the Specific Plan in itself would not result in a substantial adverse change in the significance of any historical resources. None of the components of the Specific Plan would explicitly involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings. Existing regulations and discretionary review procedures in the Specific Plan would ensure impacts on historical resources from major alterations, additions, or new construction would be avoided or reduced to less than significant. A project that proposes to materially impair a listed or identified historical resource would be discretionary and require a project-level CEQA document. As the Specific Plan would have a less than significant impact on historical resources, mitigation measures are not required.

1. INTRODUCTION

1.1 PURPOSE

The purpose of this report is to analyze whether the proposed El Segundo Downtown Specific Plan (Specific Plan) update would impact historical resources as defined by the California Environmental Quality Act (CEQA). CEQA defines a historical resource as a property listed in or determined to be eligible for listing in the California Register of Historical Resources.¹ The City of El Segundo adopted the Specific Plan in 2000 to implement the community’s vision for Downtown. The purpose of the Specific Plan update is to provide new development standards, design regulations, and other criteria to address the current and future needs of Downtown. The Specific Plan update area is located in the northwest quadrant of the City of El Segundo, which is, approximately 20 miles southwest from downtown Los Angeles. The Los Angeles International Airport (LAX) is located to north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east, the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west.

1.2 QUALIFICATIONS OF PREPARER

Teresa Grimes | Historic Preservation (TGHP) was retained to identify historical resources within the Specific Plan area, to assess any potential impacts the Specific Plan may have on the identified historical resources, and to recommend mitigation measures, as warranted, for compliance with CEQA. She fulfills the qualifications for a historic preservation professional outlined in Title 36 of the Code of Federal Regulations, Part 61. Her résumé is included in **Appendix A**.

1.3 DOWNTOWN SPECIFIC PLAN AREA

The Specific Plan update area is approximately 43.8 acres in size (see **Figure 1**). The majority of the lots within the Specific Plan update area are 25 feet wide by 140 feet deep, or 3,500 square feet in area, although many of the lots have been combined and developed under common ownership. The Specific Plan update area has a north-south orientation from Mariposa Avenue on the north and El Segundo Boulevard on the south and includes the 100-500 blocks of Main Street, the 100-300 blocks of Richmond Street, and the abutting properties along Grand Avenue. Grand Avenue is one of only two streets in El Segundo that connects to the beach. It is the principal east-west street in Downtown and crosses both Main and Richmond Streets. It is one of the widest streets in the City, having formerly been an alignment of the Pacific Electric Railway. The El Segundo Civic Center is located within the Specific Plan update area on the block bound by Main Street on the west, Standard Street on the east, Grand Avenue on the south, and Holly Street on the north. With the notable exception of the Chevron Refinery on the south, the Specific Plan is mostly surrounded by residential and institutional uses.

¹ Public Resources Code § 21084.1

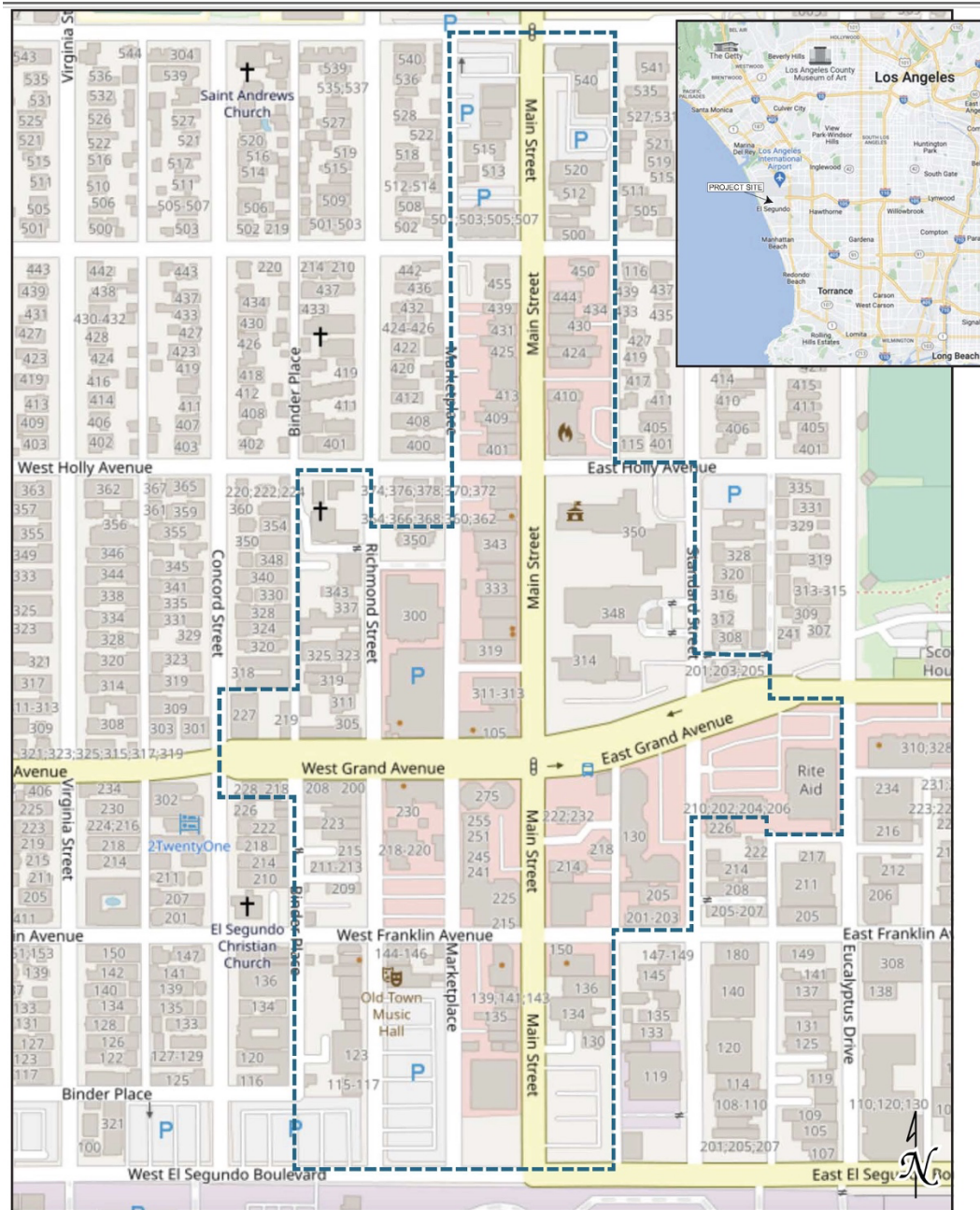


Figure 1: Specific Plan update area dashed in black. Source: Eco Tierra Consulting, 2023.

1.4 PREVIOUS DESIGNATIONS AND EVALUATIONS

The following sources were consulted to determine if the Specific Plan update area includes properties currently designated under federal, state, or local landmark or historic district programs or previously evaluated as potential historical resources in a study or survey:

1. The Built Environment Resources Directory (BERD), which is maintained by the State Office of Historic Preservation (SOHP) was reviewed to determine if any properties

comprising the Specific Plan update area are listed and determined to be eligible for listing in the National Register of Historic Places, listed and determined to be eligible for listing in the California Register of Historical Resources, listed California Registered Historical Landmarks, listed Points of Historical Interest, or evaluated in historic resource surveys and other planning activities processed through SOHP. This research revealed no such properties within the Specific Plan update area.

2. The City of El Segundo was contacted to determine if any properties comprising the Specific Plan update area are listed under the local Historic Preservation Ordinance. This research revealed that no properties within the Specific Plan update area have been listed in the El Segundo Register of Cultural Resources.
3. The 2000 Specific Plan identified 22 buildings on the 100 and 200 blocks of Richmond Street as “Historically Significant;” however, they were not evaluated during the 2000 Specific Plan process against the criteria for significance and aspects of integrity required for listing under federal, state, and local landmark and historic district programs.

1.5 METHODOLOGY

To identify potential historical resources within the Specific Plan update area and assess any potential impacts the Specific Plan update may have on the identified historical resources, TGHP performed the following tasks:

1. Conducted general research on the history of the Specific Plan update area including a review of primary and secondary sources. Primary sources included Sanborn maps, tract maps, historic aerial photographs, city directories, U.S. Census records, and newspaper articles.
2. Conducted a reconnaissance survey of the Specific Plan update area. Properties that were previously identified in the 2000 Specific Plan and properties over 45 years of age with the potential to qualify for listing under federal, state, and local landmark and historic district programs were photographed during the field inspection.
3. Created a list of properties that warrant further investigation as potential historical resources.
4. Reviewed the 2000 Specific Plan and prepared a memorandum reflecting changes in programs and policies related to qualified historic buildings.
5. Reviewed and analyzed the Specific Plan update to determine if the project would have an impact on the identified historical resources as defined by CEQA.

2. REGULATORY FRAMEWORK

2.1 HISTORICAL RESOURCES UNDER CEQA

CEQA defines a historical resource as a property listed in the California Register of Historical Resources (California Register) or determined to be eligible for listing in the California Register by the State Historical Resource Commission. A property designated under a local preservation ordinance or identified as eligible in a historic resource survey is presumed to be a historical resource unless a preponderance of evidence demonstrates that the property is not architecturally, historically, or culturally significant.² The lead agency has the discretion to treat a property as a historical resource if it meets statutory requirements and substantial evidence supports the conclusion. Thus, there are three categories of historical resources:

- *Mandatory historical resources* are properties listed or determined to be eligible for listing in the California Register by the State Historical Resource Commission.³ The California Register automatically includes properties listed and formally determined to be eligible for listing in the National Register of Historic Places (National Register) as well as some California State Landmarks and Points of Historical Interest.
- *Presumptive historical resources* are properties included in a local register of historical resources as defined by subdivision (k) of Section 5020.1 of the Public Resources.⁴ The El Segundo Historic Preservation Ordinance (Chapter 15-14 of the Municipal Code) meets the requirements of this subdivision. However, as of the date of this report, no properties in the proposed Downtown Specific Plan Area have been listed in the El Segundo Register of Cultural Resources (El Segundo Register). Presumptive historical resources also include properties deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1 of the Public Resources Code, unless a preponderance of the evidence demonstrates that the property is not significant. Subdivision (g) pertains to the requirements for the nomination historic resource surveys for listing in the California Register.⁵ However, as of the date of this report, El Segundo has not been comprehensively surveyed for historical resources.

² Public Resources Code § 5024.1 and Title 14 California Code of Regulations § 4850 & § 15064.5 (a) (2).

³ Title 14 California Code of Regulations § 15064.5 (a) (1).

⁴ A local register of historical resources is defined as a list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution.

⁵ A resource identified as significant in a historical resource survey may be listed in the California Register if the survey meets all of the following criteria:

1. The survey has been or will be included in the State Historic Resources Inventory.
2. The survey and the survey documentation were prepared in accordance with office procedures and requirements.
3. The properties were evaluated and determined by the office (SHOP) to have a significance rating of Category 1 to 5 on DPR Form 523.
4. If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to

- *Discretionary historical resources* are properties determined to be eligible for listing in the California Register by the lead agency. The determination must be supported by substantial evidence in light of the whole record.⁶

The National Register, California Register, and El Segundo Register designation programs are discussed below.

2.2 NATIONAL REGISTER OF HISTORIC PLACES

The National Register is "an authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment."⁷

Criteria

To be eligible for listing in the National Register, a property must be at least 50 years of age (unless the property is of "exceptional importance") and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of the following four established criteria:⁸

- A. Associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Associated with the lives of persons significant in our past; or
- C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Have yielded, or may be likely to yield, information important in prehistory or history.

Context

To be eligible for listing in the National Register, a property must be significant within a historic context. *National Register Bulletin #15* states that the significance of a historic property can be judged only when it is evaluated within its historic context. Historic contexts are "those patterns or trends in history by which a specific...property or site is understood and its

changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the integrity of the resource.

⁶ Title 14 California Code of Regulations § 15064.5 (a) (3) (4).

⁷ Title 36 Code of Federal Regulations Part 60.2.

⁸ Title 36 Code of Federal Regulations Part 60.4.

meaning...is made clear.”⁹ A property must represent an important aspect of the area’s history or prehistory and possess the requisite integrity to qualify for the National Register.

Integrity

In addition to possessing significance within a historic context, to be eligible for listing in the National Register a property must have integrity. Integrity is defined in *National Register Bulletin #15* as “the ability of a property to convey its significance.”¹⁰ Within the concept of integrity, the National Register recognizes the following seven aspects or qualities that in various combinations define integrity: feeling, association, workmanship, location, design, setting, and materials. Integrity is based on significance: why, where, and when a property is important. Thus, the significance of the property must be fully established before the integrity is analyzed.

Historic Districts

The National Register includes significant properties, which are classified as buildings, sites, districts, structures, or objects. A historic district “derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties.”¹¹

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development.¹² A district’s significance and historic integrity should help determine the boundaries. Other factors include:

- Visual barriers that mark a change in the historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;
- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;
- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and

⁹ Patrick Andrus and Rebecca Shrimpton, *National Register Bulletin #15: How to Apply the National Register Criteria for Evaluation* (Washington D.C.: U.S. Department of the Interior, 1997), 7.

¹⁰ *National Register Bulletin #15*, 44.

¹¹ *Ibid.*

¹² Title 36 Code of Federal Regulations Part 60.3 (d).

- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.¹³

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archeological values for which a district is significant because:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or
- It independently meets the criterion for listing in the National Register.¹⁴

Criteria Consideration G

Certain types of properties are not usually eligible for listing in the National Register. These properties include buildings and sites that have achieved significance within the past 50 years. Fifty years is a general estimate of the time needed to develop historical perspective and to evaluate significance. In addition to being significant under one of the four criteria listed above, these properties must meet a special requirement called a criteria consideration in order to be eligible for listing in the National Register. There are seven criteria considerations. Criteria Consideration G states "a property achieving significance within the last 50 years is eligible if it is of exceptional importance."¹⁵ This criteria consideration guards against the listing of properties of fleeting contemporary interest.

2.3 SECRETARY OF THE INTERIOR'S STANDARDS

Projects that may affect historical resources are considered to have a less than significant impact if they are consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (Standards).¹⁶ Projects with no other potential impacts qualify for a Class 31 exemption under CEQA if they meet the Standards.¹⁷ The Standards were issued by the National Park Service and are accompanied by Guidelines for four types of treatments: Preservation, Rehabilitation, Restoration, and Reconstruction. The most common treatment is rehabilitation, which is defined as "the act or process of making possible a compatible use for a property through repair, alterations, and additions while preserving those portions or features

¹³ *National Register Bulletin #21: Defining Boundaries for National Register Properties* (Washington D.C.: U.S. Department of the Interior, 1995), 12.

¹⁴ *National Register Bulletin #16: How to Complete the National Register Registration Form* (Washington D.C.: U.S. Department of the Interior, 1997), 16.

¹⁵ *Ibid.*, 41.

¹⁶ Title 14 California Code of Regulations § 15126.4 (b).

¹⁷ Title 14 California Code of Regulations § 15331.

which convey its historical, cultural, or architectural values.”¹⁸ The Standards for Rehabilitation assume that at least some repair or alteration of the historic resource will be needed in order to provide for continued or new uses.

The Standards for Rehabilitation are as follows:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place and use. Changes that create a false sense of historical development, such as adding conjectural features or elements from other historic properties, will not be undertaken.
4. Changes to a property that have acquired significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

¹⁸ Anne E. Grimmer, *The Secretary of the Interior’s Standards for Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings* (Washington, D.C.: U.S. Department of Interior, National Park Services, Technical Preservation Services, 2017), 2.

10. New additions and adjacent or related new construction will be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

It is important to note that the Standards are not intended to be prescriptive, but instead provide general guidance. They are intended to be flexible and adaptable to specific project conditions to balance continuity and change, while retaining materials and features to the maximum extent feasible. Their interpretation requires exercising professional judgment and balancing the various opportunities and constraints of any given project. Not every Standard necessarily applies to every aspect of a project, nor is it necessary to comply with every Standard to achieve compliance.

2.4 CALIFORNIA REGISTER OF HISTORICAL RESOURCES

In 1992, Governor Wilson signed Assembly Bill 2881 into law establishing the California Register. The California Register is an authoritative guide used by state and local agencies, private groups, and citizens to identify historical resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse impacts.¹⁹

The California Register consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed in the National Register and those formally Determined Eligible for the National Register;
- State Historical Landmarks from No. 770 onward; and
- Those California Points of Historical Interest that have been evaluated by SOHP and have been recommended to the State Historical Resources Commission for inclusion on the California Register.²⁰

Criteria and Integrity

For those properties not automatically listed, the criteria for eligibility of listing in the California Register are based upon National Register criteria, but are identified as 1-4 instead of A-D. To be eligible for listing in the California Register, a property generally must be at least 50 years of age and must possess significance at the local, state, or national level, under one or more of the following four criteria:²¹

¹⁹ Public Resources Code § 5024.1 (a).

²⁰ Public Resources Code § 5024.1 (d).

²¹ Public Resources Code § 5024.1 (c).

1. Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
2. Is associated with the lives of persons important in our past.
3. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Properties eligible for listing in the California Register may include buildings, sites, structures, objects, and historic districts. It is possible that properties may not retain sufficient integrity to meet the criteria for listing in the National Register, but they may still be eligible for listing in the California Register. An altered property may still have sufficient integrity for the California Register if it maintains the potential to yield significant scientific or historical information or specific data.²²

SOHP Survey Methodology

The evaluation instructions and classification system prescribed by SOHP for recording historical resources provide a Status Code for use in classifying potential historical resources. In 2003, the Status Codes were revised to address the California Register. These Status Codes are used statewide in the preparation of historical resource surveys and evaluation reports. The first code is a number that indicates the general category of evaluation. The second code is a letter that indicates whether the property is separately eligible (S), eligible as part of a district (D), or both (B). There is sometimes a third code that describes some of the circumstances or conditions of the evaluation. The general evaluation categories are as follows:

1. Listed in the National Register or the California Register.
2. Determined eligible for listing in the National Register or the California Register.
3. Appears eligible for listing in the National Register or the California Register through survey evaluation.
4. Appears eligible for listing in the National Register or the California Register through other evaluation.
5. Recognized as historically significant by local government.
6. Not eligible for listing or designation as specified.

²² Title 14 California Code of Regulations § 4852 (c).

7. Not evaluated or needs re-evaluation.

The specific Status Codes referred to in this report are as follows:

- 3S** Appears eligible for the National Register as an individual property through survey evaluation.
- 3CS** Appears eligible for the California Register as an individual property through survey evaluation.
- 5S3** Appears to be individually eligible for local listing or designation through a survey evaluation.
- 5D3** Appears to be a contributor to a district that appears eligible for local listing or designation through a survey evaluation.
- 6Z** Found ineligible for National Register, California Register, or local designation through survey evaluation.
- 7K** Resubmitted to OHP for action but not reevaluated.

2.5 EL SEGUNDO REGISTER OF CULTURAL RESOURCES

In 1993, the City of El Segundo adopted the El Segundo Historic Preservation Ordinance.²³ The Ordinance provides for the identification, protection, enhancement, and preservation of properties that reflect special elements of the City's heritage. The Ordinance is enforced by the Planning Commission, which maintains the local register of cultural resources. A property may be listed as a Cultural Resource with the written consent of the owner, if it meets one or more of the following criteria:

1. Must be at least fifty (50) years old; and
2. It is associated with persons or events significant in local, State, or national history; or
3. It reflects or exemplifies a particular period of national, State, or local history; or
4. It embodies the distinctive characteristics of a type, style, period of architecture, or method of construction.

Unlike the National and California Registers, the Ordinance makes no mention of concepts such as physical integrity or period of significance. As of the date of this report, no properties in El Segundo have been designated cultural resources.

²³ Ordinance No. 1193 and Chapter 20.52 of the Municipal Code.

2.6 EL SEGUNDO GENERAL PLAN LAND USE ELEMENT

The City of El Segundo General Plan includes a Land Use Element that recognizes the City's responsibility for preserving and enhancing its cultural, historical, and architectural heritage. Goals, objectives, and policies related to the proposed Downtown Specific Plan include the following:

- Goal LU1 Maintain El Segundo's "small town" atmosphere and provide an attractive place to live and work.
 - Objective LU1-4 Preserve and maintain the City's Downtown and historic areas as integral to the City's appearance and function.
- Goal LU2 Preserve and enhance the City's cultural heritage and buildings or sites that are of cultural, historical, or architectural importance.
 - Objective LU2-1 Maintain the distinct character of the existing areas of the City.
 - Policy LU2-1.1 New development adjacent to a building of cultural, historical, or architectural significance shall be designed with a consistent scale and similar use of materials.
 - Objective LU2-2 Encourage the preservation of historical and cultural sites and monuments.
 - Policy LU2-2.1 Take an active role in documenting and preserving buildings of cultural, historical, and architectural significance. This should include residential, non-residential, and publicly owned buildings.
 - Program LU2-2.1A The City shall conduct a thorough survey of all buildings of cultural, historical, or architectural significance within the City.
 - Program LU2-2.1B The City shall investigate methods for preserving historical buildings, including overlay zoning districts, historical designations, and national register listings.
 - Policy LU2-2.2 Take an active role in assisting individual owners or groups in documenting and preserving building of potential cultural, historical, or architectural significance.

3. ENVIRONMENTAL SETTING

3.1 BRIEF HISTORY OF EL SEGUNDO

Prior to El Segundo's incorporation in 1917, the area was part of the 1822 Spanish land grant for Rancho Sausal Redondo, which extended from the present-day communities of Playa del Rey on the north, Inglewood on the east, and Hermosa Beach on the south. The nearly 25,000 acres of land consisted of wheat and barley fields on which cattle and sheep grazed.



Figure 2: Prior to the development of the Standard Oil Refinery and the development of the townsite, El Segundo was occupied by farmland. Source: Herald Examiner Photo Collection, Los Angeles Public Library, 1914.

In 1911, Standard Oil of California sent a team of five men to the Los Angeles area to scout for a location to refine and transport oil pumped from fields in Fullerton and Torrance. The team chose the El Segundo location for three reasons. First, it was adjacent to the seashore, which was necessary for tanker access. Second, the land was undeveloped, which kept costs down. The relatively strong winds and shifting sand dunes, made the area unsuitable for seaside recreation.²⁴ Finally, the location was near enough a population center to provide them with the necessary workforce. Standard Oil bought 840 acres on June 11th for their refinery, which was called El Segundo (Spanish for “the second one”).²⁵ The refinery opened for business on November 27th.

²⁴ Arch C. Gerlach, “Growth of El Segundo, California,” *Economic Geography*, Vol. 16, No. 2 (April 1940), 225.

²⁵ The company's first refinery in Richmond had been dubbed El Primera.



Figure 3: The El Segundo Refinery occupies most of the southwest quadrant of the City. Source: www.elsegundo.chevron.com, no date.

The same time Standard Oil was constructing their new refinery, the El Segundo Land and Improvement Company was platting a new townsite. A 1,470-acre area was purchased from J.S. Vosberg, who had farmed the land since the 1880s. The Land and Improvement Company negotiated with the Pacific Electric Company to construct a new rail line from Hawthorne. The Hawthorne-El Segundo Line opened in 1914. The line entered the town on the east and curved northerly until it reached Lomita where it continued southerly to the end of the line at the El Segundo Station.



Figure 4: The Pacific Electric's Hawthorne-El Segundo Line operated from 1914 until 1930. Source: Herald Examiner Photo Collection, Los Angeles Public Library, 1914.



Figure 5: The Spanish Colonial Revival style El Segundo Station was located at Eucalyptus Drive and Grand Avenue. Source: Herald Examiner Photo Collection, Los Angeles Public Library, 1914.

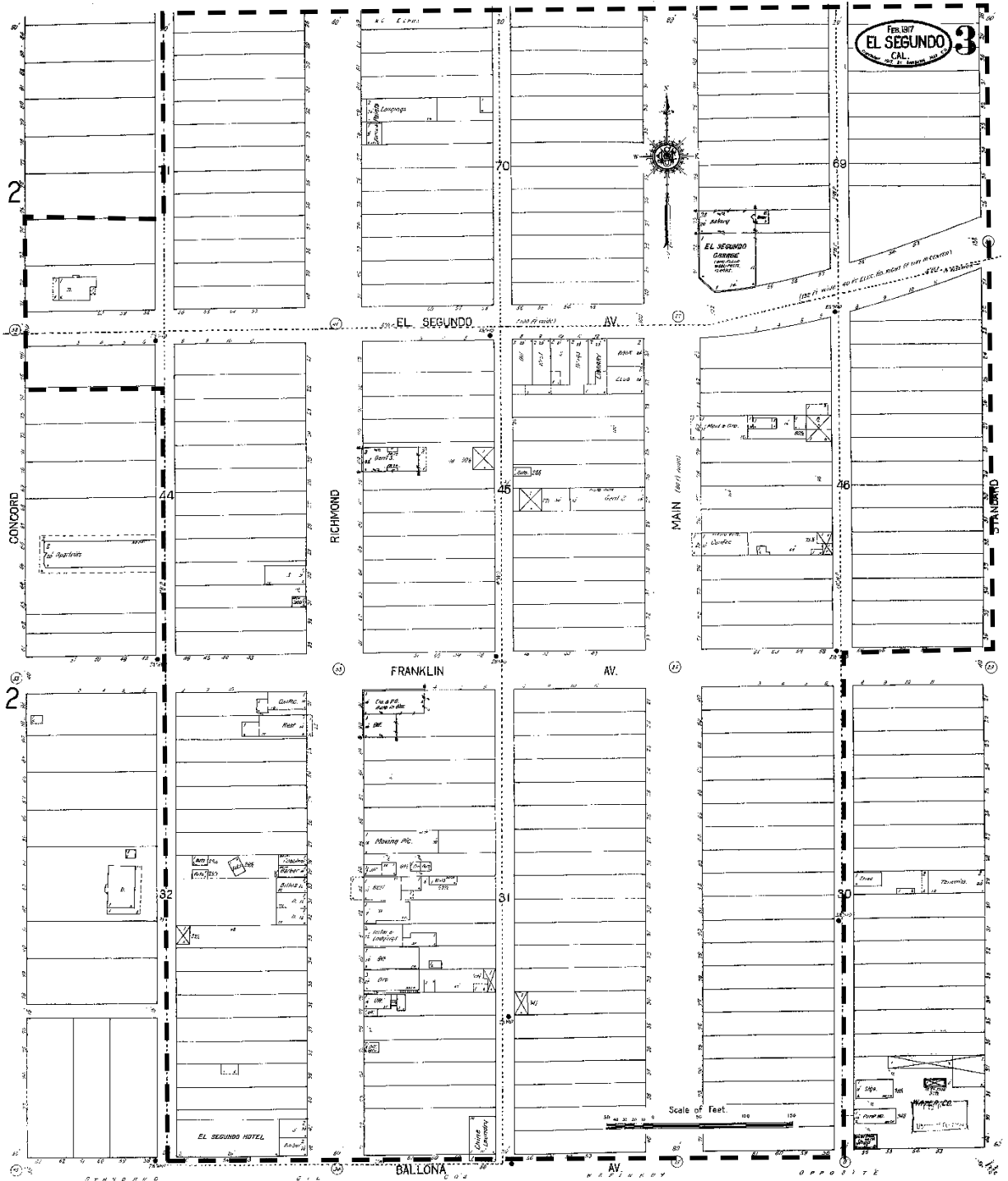


Figure 6: 1917 Sanborn Map, note that present-day El Segundo Boulevard was called Ballona Avenue and present-day Grand Avenue was called El Segundo Avenue. The southern portion of the Specific Plan update area is dashed in black.

For the first years after incorporation, the local economy of El Segundo was focused solely on the oil industry. During this period, the city was sparsely developed with single-family houses scattered on lots between Main Street and Loma Vista Street on the east and west and

Mariposa Avenue and El Segundo Boulevard on the north and south. A small business district began to form on Richmond Street between Grand Avenue on the north and El Segundo Boulevard on the south. It included stores, restaurants, a movie theater, and a hotel. On May 10, 1917, these wood framed buildings were destroyed by a fire.²⁶ The population was large enough to support a school and a few churches, which were mostly located toward Mariposa Avenue. Development remained slow but steady through the 1920s. The population grew from 1,563 in 1920 to 3,503 in 1930.²⁷ A city hall and library were constructed at the northwest corner of Richmond Street and Franklin Avenue and more commercial buildings were constructed along Grand Avenue. Although the original city hall and library have been demolished, the annex remains on Franklin Avenue. When the commercial buildings were reconstructed, brick was used instead of wood.



Figure 7: Richmond Street looking northwest from Franklin Avenue. The original City Hall is on the left. Source: James H. Osborne Photograph Collection, California State University Library, Dominguez Hills, circa 1940.

The refinery in El Segundo benefitted from the Southern California oil booms of the 1920s, including the discovery of new oil fields at Huntington Beach in 1920, Long Beach and Santa Fe Springs in 1921, Carson in 1923, and Inglewood in 1924. By the 1930s, Standard Oil of California began using the “Chevron” name for service stations and oil products, later transitioning to “Calso” in the 1940s and 1950s before returning to Chevron. The refinery complex exists today, but the name Standard Oil of California was officially changed to the Chevron Corporation in

²⁶ Eileen Curry Hunter, *El Segundo Seventy-Five Years: A Pictorial History of El Segundo* (El Segundo: H2 Limited, 1991), 41.

²⁷ U.S. Census.

1984.²⁸ The Chevron Refinery occupies approximately one-third of the city in an area south of El Segundo Boulevard and west of Pacific Coast Highway.



Figure 8: In 1937, the City of Los Angeles purchased Mines Field and changed the name to the Los Angeles Municipal Airport. Source: www.waterandpower.org, 1937.

The city remained a one-industry town until the 1920s, when Mines Field, a landing strip for early aviators north of El Segundo, was chosen as the site for the new Los Angeles Municipal Airport. Private enterprises quickly began to construct factories in the area and the aviation industry began to rival the oil industry as the economic engine of El Segundo. In 1927, Watt L. Moreland, of Moreland Aircraft, built the first factory on a 15-acre tract just south of Mines Field. Douglas Aircraft, which was founded in Santa Monica, acquired this factory in 1932 and eventually negotiated with the Northrop Division of the Douglas Aircraft Company to take it over. The Northrop Division (later renamed the El Segundo Division) produced planes at the factory such as the Gamma 2B, Delta 8-passenger, Basic Trainer (BT)-1 bomber and A-17 jet. In 1937, John Northrop left Douglas Aircraft to start his own company closer to Hawthorne, which he named Northrop Aircraft Incorporated. That same year, the City of Los Angeles purchased Mines Field and renamed the site the Los Angeles Municipal Airport.²⁹ Four years later, a \$3.5 million bond was issued for new construction, which included improved runways and dedicated structures to facilitate airmail and passenger traffic between Los Angeles and other cities.

²⁸ "History," Chevron Global, accessed on November 17, 2021, <https://elsegundo.chevron.com/about/history>

²⁹ Up to this point, the City of Los Angeles had been leasing the property.

Nevertheless, the Los Angeles Municipal Airport would not become a principal transportation hub until after World War II.³⁰



Figure 9: The Douglas Aircraft, El Segundo Division around 1940. The intersection of Aviation Boulevard and Imperial Highway is at the lower left. Source Boeing Company via Patricia McGinnis.

During World War II, the El Segundo Division of Douglas solely produced military aircraft, including the DC-5 transport, SBD Dauntless dive-bomber and the A-20 Havoc medium bomber. In the 1930s and 1940s, other aviation industrial giants such as Hughes Aircraft and North American Aviation (Rockwell), continued to grow their manufacturing plants and offices in El Segundo. By the end of World War II, the Los Angeles Municipal Airport was well positioned to take advantage of the burgeoning aviation industry in El Segundo. New runways, passenger terminals, hangars, control tower, and maintenance sheds were constructed and ready for use, and four major airlines -- American, Trans World, United, and Western -- abandoned Lockheed

Field in Burbank in favor of the expanded municipal airport in Los Angeles.

Between 1940 and 1955, El Segundo became a world class industrial center. The population grew from 3,738 in 1940 to 8,011 in 1950 as a result of an influx of workers in the aviation and defense industries.³¹ The residential area west and north of Downtown continued to be developed with single-family houses with detached garages, but also included apartment buildings. Nearly 2,000 new housing units were constructed in the 1950s.³² Many workers; however, commuted from neighboring communities even as more units were constructed in the 1960s and 1970s.

During the postwar period, Downtown expanded northward. While commercial development remained small in scale, the nucleus shifted from the 100 and 200 blocks of Richmond Street south of Grand Avenue to the 300 and 400 blocks of Main Street north of Grand Avenue. Plans for a new Fire Station and Police Station at Main Street and Grand Avenue were prepared in 1948. Lacking funds for both, the City Council opted for the construction of Fire Station No. 1,

³⁰ Nathan Masters, "From Mines Field to LAX: The Early History of L.A. International Airport," www.kcet.org, accessed on November 17, 2021, <https://www.kcet.org/shows/lost-la/from-mines-field-to-lax-the-early-history-of-l-a-international-airport>

³¹ U.S. Census.

³² City of El Segundo Housing Element, September 2021, 25.

which was completed in 1951.³³ The Civic Center was completed in 1956 with the dedication of the new Police Station and City Hall.³⁴

In 1954, the Los Angeles Air Force Base between N. Douglas Street and Aviation Boulevard was established. This base was the only active-duty military base in Los Angeles County and supported the 61st Air Base Wing and the Space and Missile Systems Center. In 1955, Ramo-Wooldridge purchased 40 acres on the southeast corner of Aviation Boulevard and El Segundo Boulevard, forming the research and development site to be paired with the base. The Air Force Base kept the aviation and research production in the region working, as the United States military turned towards space flight. By 1956, the aerospace industry had overtaken oil as the major industry and job provider in El Segundo. Other aerospace companies established offices in the area such as Boeing in 1957.



Figure 10: Aerial photograph of El Segundo in 1959; Downtown is outlined in red. Source: University of California, Santa Barbara, Geospatial Collection.

³³ Hunter, 90.

³⁴ "El Segundo City Hall Dedication Date Set," *Los Angeles Times*, January 9, 1956.

Smoky Hollow, east of Downtown and north of the Chevron Refinery, rapidly developed into an industrial district after World War II due to the influence of local aerospace companies and general demand for manufacturing, distribution, and industrial service uses. The district was largely built out by the early 1960s.

Beginning in the 1980s, commercial and office buildings began to appear along Sepulveda Boulevard, between Grand Avenue and El Segundo Boulevard. In 1980, a large business park on the northeast corner of Grand Avenue and Sepulveda Boulevard (Pacific Coast Hwy) was established with three large, concrete, and tinted glass buildings. One of the most notable developments was the construction of the Pacific Corporate Towers at Pacific Coast Highway and Grand Avenues, built in 1983. That same year, 144 additional commercial properties were built in El Segundo, totaling over 1 million square feet of commercial space. In 1990, toy company, Mattel, moved its world headquarters to El Segundo, also just off Sepulveda Boulevard. In the late 1990s, strip malls with anchoring groceries stores filled in the remaining available space along Sepulveda Boulevard.

3.2 RECONNAISSANCE SURVEY FINDINGS

A reconnaissance survey of the Specific Plan update area was conducted from the public right-of-way in November of 2021. Properties that were previously identified in the 2000 Specific Plan as potentially significant and properties over 45 years of age with the potential to qualify for listing under federal, state, and local landmark and historic district programs were assigned preliminary Status Codes (see **Section 2.3, Page 9**), which is a system for recording and classifying historical resources developed by OHP. There are 103 parcels in the Specific Plan update area with buildings constructed before 1977. Some parcels contain more than one building, while some buildings occupy more than one parcel. A complete list of properties is included in **Appendix B** and a summary of the survey findings follows.

Individual Properties Potentially Eligible as Historical Resources

Four properties in the Specific Plan update area appear to be individually eligible as historical resources. They are each pictured and described in **Table 1**.


TABLE 1: Potentially Eligible Historical Resources	
<p>Address: 105 W. Grand Avenue APN: 4136-016-020 Date: 1928 Status Code: 5s3</p> <p>This property appears to be eligible for listing in the El Segundo Register as it is over 50 years of age and reflects the commercial development of Downtown during the 1920s. The property is a rare remaining example of a mixed-use commercial building and is</p>	

TABLE 1: Potentially Eligible Historical Resources

prominently situated at the corner of Grand Avenue and Main Street. The building may not retain sufficient integrity for listing in the National and California Registers as a result of storefront alterations.

Address: 140 Richmond Street
APN: 4136-026-0002
Name: State Theater/El Segundo Theater/Old Town Music Hall
Date: 1921
Status Code: 5s3/5d3

This property appears to be eligible for listing in the El Segundo Register as it is over 50 years of age and reflects the commercial development of Downtown during the 1920s. The property is a rare remaining example of a theater that was originally a live performance venue called the State Theater. The theater was adapted for motion picture viewing but closed in the mid-1930s. In 1944, it reopened as the El Segundo Theater and in 1957 the State Theater name was restored. It has operated as the Old Town Music Hall since 1968 and specializes in concerts and silent films accompanied live on a Mighty Wurlitzer pipe organ. The building may not retain sufficient integrity for listing in the National and California Registers as a result of alterations to the facade. The property is also contributing to a potential historic district on Richmond Street.




Address: 203 Richmond Street
APN: 4136-024-017
Name: City Hall Annex
Date: 1925
Status Code: 3s/3cs/5s3/5d3

This property appears to be eligible for listing in the National, California, and El Segundo Registers as it is over 50 years of age and reflects the institutional development of the City. The property was the former location of the first El Segundo City Hall and Library. The building retains sufficient integrity to convey



TABLE 1: Potentially Eligible Historical Resources

<p>its significance as the City Hall Annex. The property is also contributing to a potential historic district on Richmond Street.</p>	
<p>Address: 218-220 Richmond Street APN: 4136-025-004 Name: Gilbert Apartments Date: 1915 Status Code: 3s/3cs/5s3/5d3 This property appears to be eligible for listing in the National, California, and El Segundo Registers as it is over 50 years of age and reflects the commercial development of Downtown during the 1910s. The building retains sufficient integrity to convey its significance as one of the few remaining examples of a mixed-use commercial building from the period. The property is also contributing to a potential historic district on Richmond Street.</p>	

Potentially Eligible Historic District

One group of properties in the Specific Plan update area appears to be collectively eligible as a historic district. They are located on the 100 and 200 blocks of Richmond Street and reflect the earliest commercial development in El Segundo. Constructed between 1915 and 1947, the buildings are one and two stories in height and mostly unreinforced masonry construction. There are 27 Assessor Parcel Numbers listed in **Table 2**; however, in some cases there may be more than one building on the property. There are 16 contributing properties and 11 non-contributing properties. Of the 11 non-contributing properties 9 are occupied by buildings and 2 are surface parking lots. The non-contributing properties were constructed in the late twentieth and early twenty-first centuries, but are compatible with the height, scale, and massing of the contributing properties. The historic district appears to be eligible for listing in the El Segundo Register as the buildings are over 50 years of age and reflect the prewar commercial development of Downtown. The historic district may not retain sufficient integrity for listing in the National and California Registers as a result of storefront alterations as well as the demolition of three buildings in 2004.

TABLE 2: Properties in Potentially Eligible Historic District

APN	Address	Build Date	Status Code	Notes	Map Key No.
4136-025-020	116-122 W. Grand Ave.	1923	5d3	The Assessor shows three buildings on this	1a

TABLE 2: Properties in Potentially Eligible Historic District

APN	Address	Build Date	Status Code	Notes	Map Key No.
	130 W. Grand Avenue	1923	5d3	parcel constructed in 1923, 1951, and 1974; however, there are two buildings on the 1929 Sanborn map.	1b
	230 Richmond St.	1974	6z		1c
4136-025-003	222 Richmond St.	1947	5d3		2
4136-025-004	218-220 Richmond St.	1915	5d3	This address range historically included the two-story building on this parcel, but now seems include the one-story portion that was historically associated with the address 216.	3a
	216 Richmond St.	1920	5d3	The Assessor build date is 1920; however, this one-story building is not present on the 1929 Sanborn map.	3b
4136-025-900	N/A	N/A	6z	Parking lot.	4
4136-024-015	202 W. Grand Ave.	1925	5d3	Substantially altered in 1945, but retains integrity from period of significance.	5
4136-024-014	225 Richmond St.	1924	5d3		6
4136-024-013	223 Richmond St.	1922	5d3		7
4136-024-012	221 Richmond St.	1926	6z	Substantially altered in 1960, and appears to be recently remodeled.	8
4136-024-011	215 Richmond St.	1925	6z	Substantially altered in 1960, and appears to be recently remodeled.	9
4136-024-010	211-213 Richmond St.	1923	5d3		10
4136-024-009	N/A	N/A	6z	Parking lot.	11
4136-024-008	209 Richmond St.	1920	5d3		12
4136-024-017	203 Richmond St.	1925	5d3	City Hall Annex, also individually eligible.	13
4136-026-001	146 Richmond St.	1915	5d3	The Assessor shows one building on this	14a
	144 Richmond St.	1915	5d3		14b

TABLE 2: Properties in Potentially Eligible Historic District					
APN	Address	Build Date	Status Code	Notes	Map Key No.
				parcel, but the 1929 Sanborn map shows two.	
4136-026-002	142 Richmond St.	1968	6Z		15a
	140 Richmond St.	1921	5d3	Old Town Music Hall, also individually eligible.	15b
4136-027-021	147 Richmond St.	1988	6z		16
4136-027-020	145 Richmond St.	1915	5d3		17
4136-027-019	143 Richmond St.	1923	5d3		18
4136-027-018	139 Richmond St.	1923	5d3		19
4136-027-017	135 Richmond St.	2016	6z		20
4136-027-016	133 Richmond St.	2016	6z		21
4136-027-015	131 Richmond St.	1920	5d3		22
4136-027-032	127 Richmond St.*	2004	6z	The building on this property was identified as a Historic Structure in the 2000 Specific Plan, but was apparently demolished.	23
4136-027-033	125 Richmond St.*	2004	6z	The building on this property was identified as a Historic Structure in the 2000 Specific Plan, but was apparently demolished.	24
4136-027-034	123 Richmond St.*	2004	6z	The building on this property was identified as a Historic Structure in the 2000 Specific Plan, but was apparently demolished.	25
4136-027-035	121 Richmond St.*	2004	6z		26
4136-027-011	117 Richmond St.	1922	5d3		27a
	115 Richmond St.	1918	5d3		27b

* These four parcels are now occupied by a single building.



Figure 10: Potential Historic District.

4. PROJECT IMPACTS

4.1 THRESHOLDS FOR IMPACTS ON HISTORICAL RESOURCES

The *CEQA Guidelines* set the standard for determining the significance of impacts to historical resources in Title 14 California Code of Regulations Section 15064.5(b), which states:

A project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment.

Title 14 California Code of Regulations Section 15064.5(b)(1) further clarifies “substantial adverse change” as follows:

Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.

Title 14 California Code of Regulations Section 15064.5(b)(2)(C) in turn explains that a historical resource is “materially impaired” when a project:

Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

As a property conveys its significance as a historical resource through its physical characteristics, the test for determining whether or not a proposed project will have a significant impact on an identified historical resource is whether or not the project will alter in an adverse manner the integrity of the historical resource such that it would no longer be eligible for listing in the National Register, California Register, or other landmark programs such as the El Segundo Register of Cultural Resources.

4.2 PROJECT DESCRIPTION³⁵

The project is a revision to the existing El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The Specific Plan update would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Specific Plan Update would include public improvements and streetscape guidelines, private urban form

³⁵ Excerpted from the El Segundo Downtown Specific Plan Update Initial Study, January 2023.

criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

Specific Plan Update Districts

The City adopted the existing El Segundo Downtown Specific Plan on August 1, 2000. The district boundaries within the existing Specific Plan were analyzed and refined for this update based upon existing community values, expected market demand, and shared characteristics, including the vision of a range of allowable uses and development standards to support the desired future condition of the districts. The district-based approach is by nature a “mixed-use” zoning approach, where the desired activities and building forms dictate what is conditionally allowed and what is not allowed. This hybrid approach to zoning combines form-based development standards with a selection of compatible uses tailored for each Specific Plan district and allows for shaping of the built environment, while providing flexibility in the types of allowable uses. The existing Specific Plan area is divided into six districts (Main Street District, Main Street Transitional District, Richmond Street District, North Richmond Street District, Grand Avenue District, and West Grand Avenue Transitional District) and the proposed Specific Plan update would instead consolidate the Specific Plan area into four districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts. **Figure 11** shows the boundaries of the four districts.

Main Street District

This district would be the Downtown core or “heart” and runs north-south along Main Street between Grand Avenue and Mariposa Avenue and is bounded by the alleys to the east and west. The district would contain a wide variety of commercial uses and abuts Multi-Family Residential (R-2 and R-3) uses to the east and west across the adjacent alleyways. This district would include portions of the previous existing Specific Plan districts: Main Street District and Main Street Transitional District.

The Main Street District would:

- Provide for a variety of uses including retail sales and services, restaurants, and bars, with office and residential units permitted above and behind the ground floor Main Street frontage.
- Promote a pedestrian-oriented and family-friendly environment with outdoor dining, gathering areas, and enhanced streetscapes with additional lighting and places to sit and rest while enjoying the shade from the lush tree canopy.
- Incorporate standards that maintain and enhance the historic Downtown character with reduced building heights along the Main Street frontage, additional building form and articulation criteria to emulate typical 25-foot lot widths, additional transparency

requirements on the ground floor to enhance the pedestrian experience, and buildings located at the street edge with parking located from behind accessed from the alley.

The Main Street District would include development standards, including building form, massing, and articulation standards that maintain the historic small-town character of Downtown. Residential and office uses would be allowed above or behind Main Street retail. Parking would be required to be accessed from the alley. The existing Specific Plan contains similar regulations. The Specific Plan update would translate existing building regulations to focus on building form. Parking strategies would continue to allow for use of an in-lieu fee program to satisfy onsite parking requirements and parking would continue to be required to be accessed from the alley.

Currently, the Downtown Commercial designation allows billiard-pool rooms and bowling alleys, daycare centers, financial institutions, general offices, governmental buildings, medical-dental offices, restaurants, retail uses, and schools. The Specific Plan update would allow similar uses and reflect terminology for contemporary uses.

Allowed building heights along Main Street would be a maximum 30 feet at street edge and up to 45 feet with a 10-foot step back from the front property line. Allowed building heights at alley frontages would be a maximum of 45 feet. Allowable height regulations would remain the same except for the step back requirements which currently provide for a 25-foot step back above the first floor that would be reduced to 10 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach.

Richmond Street District

This district would be similar in nature to the Main Street District, and it contains some of the oldest commercial buildings in the city, including the Old Town Music Hall. The district would abut multi-family residential (R-3) uses to the west across the alley. It would be an eclectic mixed-use environment of commercial and residential uses and includes the existing Specific Plan districts: Richmond Street District, North Richmond Street District, Grand Avenue District, and West Grand Avenue Transitional District.

The Richmond Street District would:

- Provide for a variety of uses including retail sales and service, restaurants, and bars, residential units, professional, medical and dental offices, schools, and banks.
- Foster an eclectic mixed-use environment, allowing for more flexibility in the mixture of commercial uses including professional office and stand-alone residential permitted on the ground floor fronting Richmond Street.

- Celebrate the traditional “Old Town” character and entertainment uses within the area by encouraging entertainment options, outdoor dining, clubs, and restaurants and supporting filming related uses, antique stores, arts and crafts, and design studios.
- Enhance streetscapes with additional lighting, places to sit, and landscaping.

The proposed Richmond Street District would combine three of the existing districts (Richmond Street District, North Richmond Street District, Grand Avenue District, and West Grand Avenue Transitional District). This approach would create a common vision and more simplified zoning approach to this smaller area. Development would continue to be located at the street edge and complement the traditional building forms in the district. The Specific Plan update contains a recommendation to improve pedestrian connectivity on Richmond Street (between Grand Avenue and Franklin Avenue) which would eliminate parking but accommodate opportunities for outdoor dining, expanded sidewalks and community gathering. An alternative future option would be to allow permanent closure of this street segment and create a multi-purpose plaza.

Currently, the Downtown Commercial designation allows billiard-pool rooms and bowling alleys, daycare centers, financial institutions, general offices, governmental buildings, medical-dental offices, restaurants, retail uses, and schools. The Specific Plan update would allow similar uses and reflect terminology for contemporary uses.

The updated Specific Plan would eliminate the City’s 25-foot step back requirements but keep the maximum building height of 45 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach. Parking strategies would continue to allow for use of an in-lieu fee program to satisfy onsite parking requirements and parking would continue to be required to be accessed from the alley.

Grand Avenue District

The Grand Avenue District would serve as a gateway from the west entry of the City of El Segundo to the Downtown core. This district would contain larger lots and contiguous parcels which provide the highest redevelopment opportunity within the Specific Plan update area. The District would be bounded by multi-family residential uses (R-3) to the north with light industrial and office (SH-W) to the south, which provide a buffer to surrounding single-family residential uses. This district would contain and include a few lots that are currently zoned C-RS and a portion of the existing Specific Plan’s Main Street Transitional District.

The Grand Avenue District would:

Provide an opportunity to create a more pedestrian-oriented environment and a location to accommodate an increased demand for office and residential uses within the city and with the maximum building heights permitted within the Specific Plan area.

Develop a pedestrian-oriented destination with expanded sidewalks, planters, street trees and furnishings required at street edge, buildings rather than parking located at the street edge, and ground floor design criteria to establish additional window and door transparency along Main Street and Grand Avenue.

Promote community amenities including common, publicly accessible, open space, public art, and enhanced pedestrian access in and around an individual project site.

The Grand Avenue District would allow additional office and residential uses at higher densities and located on the ground floor. New development would be located at the street edge with an enhanced pedestrian environment on Grand Avenue and Main Street. This will be accomplished through building standards and by requiring parking to be onsite and located behind buildings.

Currently, the Downtown Commercial designation allows billiard-pool rooms and bowling alleys, daycare centers, financial institutions, general offices, governmental buildings, medical-dental offices, restaurants, retail uses, and schools. To address community needs and current market demand, the updated Specific Plan would allow similar uses with additional opportunities for office and residential uses.

Allowed building heights along Main Street would be increased from a maximum of 45 feet to 60 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach. Buildings would have pedestrian-oriented ground floor designs with additional window and door transparency required along Main Street. Publicly accessible open space, enhanced pedestrian access in and around a site, and expanded sidewalks with planters, street trees and furnishings located at the street edge. Parking would be required on-site or via in lieu fees with minimal access points along Grand Avenue and Main Street.

Civic Center District

Located centrally in the Specific Plan area, this district includes City Hall, the El Segundo Police Department, the El Segundo Fire Department, and existing public plaza and open spaces. This district was part of the previous 2000 Specific Plan's Main Street District.

The Civic Center District will:

- Allow for activities for all ages with enhanced and flexible multi-use outdoor gathering areas.
- Enhance opportunities for outdoor entertainment and temporary events and infuse outdoor retail uses such as newsstands, coffee carts, flower stands, vendors, and food trucks.

- Expand existing uses to include governmental offices and public safety facilities, recreational uses, outdoor entertainment and temporary events, outdoor retail uses, retail sales and services, residential units, and a location for a future public parking structure.

The Civic Center District would redesign gathering spaces for outdoor entertainment and events, reduce lawn areas and add public uses and activities, and add a public parking structure to serve Downtown patrons, City Hall employees and visitors. A phased approach to Civic Center redevelopment is recommended.

The Civic Center District area would be removed from the current Main Street District to focus uses around civic and community needs and activities. This area lends itself to buildings with the greatest height in the Specific Plan. Allowed building heights would be increased from 45 feet to 60 feet. In addition, minimum lot area, floor area ratio, and maximum residential density regulations would be removed and translated to a form-based approach. Should the City decide to redevelop City Hall in a compact fashion, future opportunities for residential uses (not to exceed overall projected Specific Plan capacity) and limited complementary commercial uses may be considered. Parking would continue to be required onsite with the additional opportunity for provision of public parking through the addition of a parking structure.

General Plan and Zoning Designations

The Specific Plan update proposes to expand the boundaries of the existing Specific Plan area to include eight parcels located on Standard Street to the north and south of Grand Avenue. The eight parcels would require amendments to the Land Use Element of the City’s General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Specific Plan update would also amend the City’s zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan. The existing and proposed land use and zoning are shown in Figures 3 through 6.

The Specific Plan update is proposed to accommodate future market demand in the project area. The potential demand within the project area (through 2040) is shown in **Table 3**.

TABLE 3: Proposed Land Use Increase in Downtown El Segundo	
Use	Proposed
Retail and Restaurant	130,000 square feet
Office	200,000 square feet
Medical Office	24,000 square feet
Residential Units	300 units

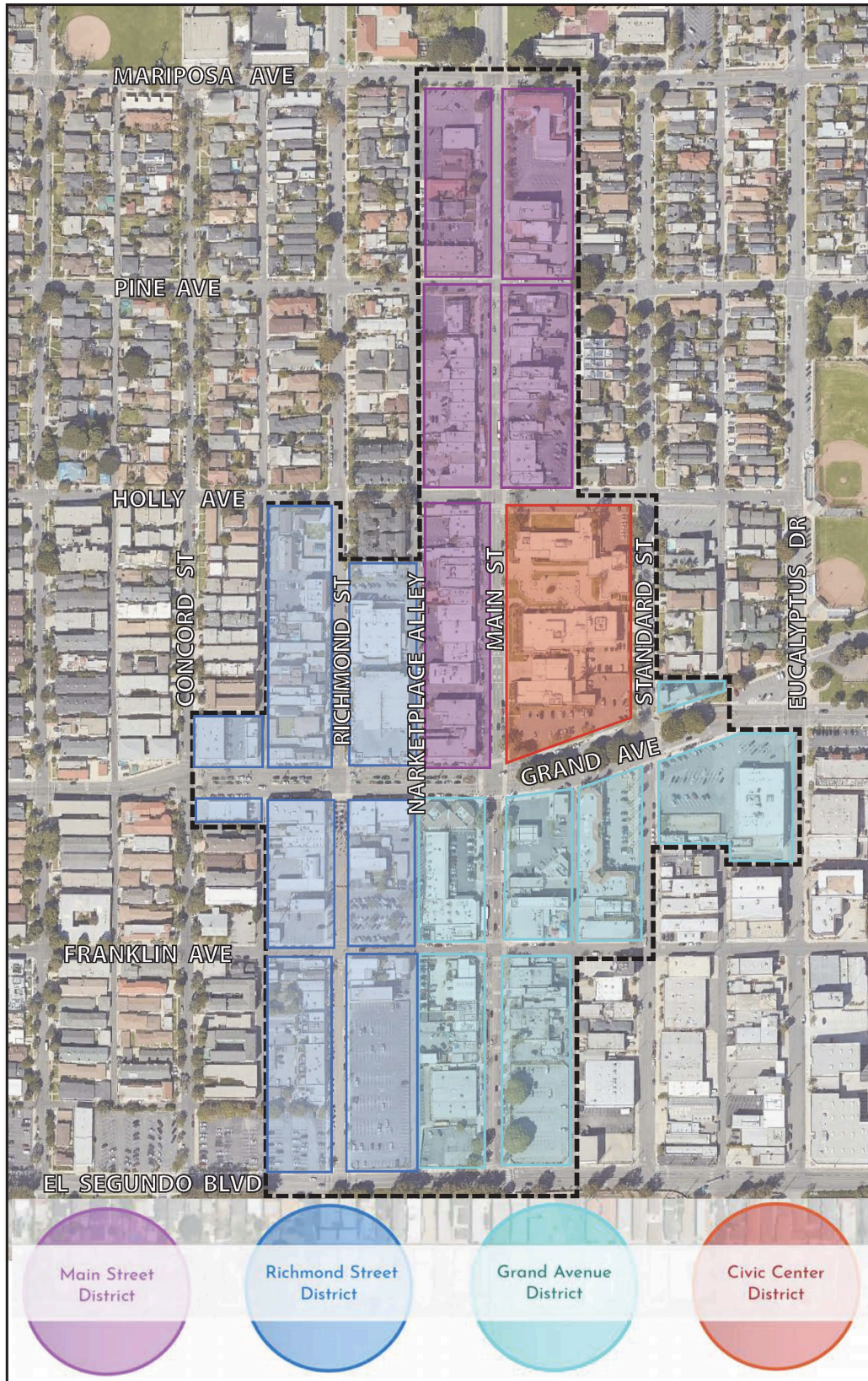


Figure 11: Proposed Specific Plan Districts. Source: RRM Design Group, 2023.

Mobility Enhancements

In addition to land use and zoning changes, the Specific Plan update would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would involve changes to the number of travel lanes on those streets. The project would eliminate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue; include the potential closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue to create a permanent pedestrian only street for outdoor dining and gathering; and include buffered bicycle lanes on Main Street and Grand Avenue. The project would include pedestrian and transit improvements in the project area, including widened sidewalks. Transit improvements could include bus stop enhancements and potentially new and/or relocated bus stops. Widened sidewalks would also provide expanded outdoor seating and dining areas for area restaurants. Lastly, the Specific Plan update would include modifications to parking standards and strategies and alternatives for on-street parking and two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue.

4.3 ANALYSIS OF PROJECT IMPACTS

As described in **Section 3.2**, the Specific Plan update area does not contain any mandatory or presumptive historical resources. There are not any properties in the project area listed under federal, state, or local landmark or historic district programs. Furthermore, there are not any properties in the project area identified as significant pursuant to the criteria set forth in subdivision (g) of Section 5024.1 of the Public Resources Code.

In the reconnaissance survey conducted for this report in 2021, four properties were identified as appearing to be individually eligible as historical resources and one group of properties as appearing to be collectively eligible as a historic district. One individually eligible historical resource, the building at 105 W. Grand Avenue, is located in the Main Street District. The other individually eligible historical resources and historic district are located in the Richmond Street District. To provide a conservative analysis of project impacts, these properties are being treated as discretionary historical resources for the purposes of this report. The discussion below analyzes the major components of the Specific Plan update with regard to the thresholds for impacts on historical resources in Appendix G of the *CEQA Guidelines*.

Private Realm – Land Use and Development Standards

Adoption of the proposed private realm – land use and development standards would not explicitly involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings. The Project proposes an intensification of land uses beyond the existing Specific Plan uses and boundary. It is possible that increased development activities could involve properties occupied by historical resources, as identified in the Specific Plan. Depending on design characteristics and construction activities associated with these

future development projects, effects that may cause a substantial adverse change in the significance of an historical resource may occur. In accordance with CEQA Guidelines Sections 15064.5(b), 15064.5(b)(1) and 15064.5(b)(2)(C), these projects may have a significant effect on the environment.

Further, in the event that the site(s) of future projects become listed in the El Segundo Register of Cultural Resources in accordance with ESMC Section 15-14-3, these locations would be correspondingly designated as historic resources. Depending on design characteristics and construction activities associated with future development projects, effects that may cause a substantial adverse change in the significance of an historical resource may occur.

Chapter 7.E, of the Specific Plan (Administration, Design Review Process) requires review and approval of a Discretionary Downtown Design Review (DDR) for any of the following:

- New buildings.
- Building additions.
- Substantial exterior alterations, including installation, replacement, modifications to multiple types of architectural building features, including, without limitation, windows, doors, awnings, lighting, siding material and colors, landscaping, and signs as determined by the Director of Community Development, or his/her designee.
- Changes to the size or location of building openings, such as windows and doors.
- Outdoor retail uses and outdoor dining (including temporary dining).

Design review of projects meeting the above criteria would involve evaluation of consistency with district development standards. These standards and guidelines direct the height, form, placement, orientation, and articulation of new buildings to complement the existing scale and pattern of development. For projects on or adjacent to properties identified individually as potential historical resources or contributing to a potential historic district, DDR review shall consider the existing neighborhood character, building scale, building material, and potential impacts to historical resources. In order to approve a project subject to DDR, the approval authority must make the following findings:

- The project design is consistent with the goals, policies, and objectives of the General Plan and the Specific Plan.
- The project design substantially complies with the development standards and guidelines in Chapter 2 of the Specific Plan.

In order to find a project consistent with the goals, policies and objectives of the General Plan, the design review would consider the project's consistency with General Plan Objective LU1-4 (Preserve and maintain the City's Downtown and historic areas as integral to the City's appearance and function); Goal LU-2 (Preserve and enhance the City's cultural heritage and buildings or sites that are of cultural, historical, or architectural importance); Policy LU2-1.1 (New development adjacent to a building of cultural, historical, or architectural significance shall be designed with a consistent scale and similar use of materials); Objective LU2-2 (Encourage the preservation of historical and cultural sites and monuments); and Policy LU2-2.2 (Take an active role in assisting individual owners or groups in documenting and preserving building of potential cultural, historical, or architectural significance). The review would also consider Specific Plan Chapter 2.H, which establishes policies and guidance for preservation of historical resources within the Specific Plan area.

With implementation of the existing regulatory framework and the DDR procedures set forth in the Specific Plan, any potential impacts to historical resources would be reduced to less than significant. No mitigation measures are required.

Public Realm – Multimodal Mobility

The proposed public realm - multimodal mobility enhancements would not explicitly involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings. Even within the 100 and 200 blocks of Richmond Street that were identified as a potential historic district in the reconnaissance survey, no existing elements of the streetscape were identified as character-defining features. The existing streetscape is mostly characterized by improvements that have been made by the City in the last two decades. Multimodal mobility improvements may include sidewalk, curb cut, driveway, alley, crosswalk, bike lane, and transit service enhancements. Improvements for vehicular circulation may include a reconfiguration of roadways to reduce travel lanes and increase sidewalk widths. Such improvements would not materially impair the continued eligibility of the identified historical resources because their significance is not defined by the streetscape.

Likewise, closing a section of Main Street or Richmond Street to vehicles on a temporary or permanent basis would not involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings. There is no reason to believe minor improvements required for street closures such as the installation of bollards would materially impair the ability of a historical resource to convey its significance.

Two existing surface parking lots have been identified as possible locations for new parking structures, one at the northeast corner of Richmond Street and Franklin Avenue and one at the northwest corner of Grand Avenue and Standard Street. The construction of a new parking structure at one of these locations would not involve the demolition, destruction, relocation, or alteration of any buildings, historic or otherwise. One of these locations, Richmond Street and Franklin Avenue, is in the immediate vicinity of the potential historic district on Richmond Street. The private realm development standards include design guidelines for parking

structures that would reduce any impacts on the potential historic district to a less than significant level. The design guidelines would be enforced by the Specific Plan DDR process and would address location, height, massing, articulation of facades, lighting, landscaping, and other considerations for creating visual interest and maintaining a pedestrian-oriented environment and General and Specific Plan policies related to historic preservation. New parking structures as identified in the Specific Plan would introduce new visual features to the setting of the potential historic district and would be subject to the DDR process. In addition, the Specific Plan sets forth design standards for parking structures intended to ensure compatibility with surrounding areas. Therefore, this component of the Project would have a less than significant impact on historical resources. No mitigation measures are required.

Public Realm – Placemaking and Beautification

The proposed public realm – placemaking and beautification improvements would not explicitly involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings. As previously stated, no existing elements of the streetscape were identified as character-defining features in the reconnaissance survey. Furthermore, the existing streetscape is mostly characterized by improvements that have been made by the City in the last two decades. Placemaking and beautification improvements may include amenities for pedestrians, bicyclists, public transit riders, and motorists alike. Adding gateways, signage, street furnishings, bike racks, bus shelters, and public art; and enhancing landscaping and lighting, etc. would not materially impair the continued eligibility of the identified historical resources because their significance is not defined by the streetscape. Furthermore, the proposed guidelines would be used for the implementation of public projects and development conditions for private projects. They are intended to reinforce the small-town feel, aesthetic quality, safety, and function of the Specific Plan area and would have a positive rather than a negative effect on the identified historical resources. Therefore, this component of the Project would have a less than significant impact on historical resources. No mitigation measures are required.

Infrastructure and Public Facilities

The Project provides an overview of existing infrastructure and public facilities within the Project area. No specific improvements or changes are recommended for the implementation of the Specific Plan. The Project area includes the Civic Center; however, it was not identified as a potential historical resource. Thus, this component of the Project would not involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings and would not have a significant impact. No mitigation measures are required.

5. CONCLUSIONS

This report finds that the adoption of the Specific Plan update in itself would not result in any significant impacts on historical resources. The goal of the updated Specific Plan is to create a

balance of uses within the project area to reach its optimal potential and provide direction for streetscape beautification, outdoor gathering spaces, improved mobility, and other enhancements that would establish an inviting environment that highlights its historic character. None of the components of the Specific Plan update would explicitly involve the demolition, destruction, relocation, or alteration of the identified historical resources or their immediate surroundings. Existing City regulations and Specific Plan DDR guidelines and procedures would avoid impacts on historical resources from major alterations, additions, and new construction in the immediate vicinity. A project that proposes to demolish or adversely alter a listed or identified historical resource would be discretionary under the Specific Plan. Thus, a project-level CEQA document would be required. As the Specific Plan would have a less than significant impact on historical resources, mitigation measures are not required.

6. REFERENCES

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Sanborn Fire Insurance Maps. Various dates.

Appendix A – Résumé

TERESA GRIMES | Historic Preservation

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323-868-2391

Teresa Grimes has 30 years of experience in the field of historic preservation. She is widely recognized as an expert in the identification and evaluation of historical resources having successfully prepared dozens of landmark and historic district applications for a wide variety of property types. Teresa graduated from the University of California with a Master of Art degree in Architecture and has worked in the private, public, and non-profit sectors. Teresa has extensive experience in the preparation of environmental compliance documents in accordance with the California Environmental Quality Act including the identification of historical resources, analysis of direct, indirect, and cumulative impacts, and development of mitigation measures. Her many projects throughout Southern California include the Art Center College of Design Master Plan, Baldwin Hills Crenshaw Plaza, Cinerama Dome Entertainment Center, City of Hope Master Plan, Claremont Graduate University Master Plan, Claremont McKenna College Master Plan, John Anson Ford Theatres, Oakwood School Master Plan, Los Angeles County Museum of Art, Times Mirror Square, Sunset Las Palmas Studios, and Sunset Bronson Studios.

Educational Background

- M.A., Architecture, University of California, Los Angeles, 1992
- B.A., Political Science, University of California, Los Angeles, 1986

Qualifications

- Meets the Secretary of the Interior’s Professional Qualifications Standards for history and architectural history pursuant to the Code of Federal Regulations, 36 CFR Part 61, Appendix A.

Professional Activities

- Pasadena Heritage Board Member, 2008-2012
- Highland Park Heritage Trust, Board Member, 1996-1998
- West Hollywood Cultural Heritage Advisory Board, 1990-1994

Professional Experience

- Teresa Grimes | Historic Preservation, Principal, 2020 - Present
- GPA Consulting, Principal Architectural Historian, 2009-2020
- Christopher A. Joseph & Associates, Senior Architectural Historian, 2006-2009
- Teresa Grimes | Historic Preservation, Principal, 1999-2005, 1993-1994, 1991-1992
- Historic Resources Group, Architectural Historian, 1994-1998
- Getty Conservation Institute, Research Associate, 1992-1993
- Los Angeles Conservancy, Preservation Officer, 1988-1991

Appendix B – List of Properties in Specific Plan Update Area

APN	Full Address	Use Type	Use Description	Year Built	1929		2000 DSP	TGHP Preliminary Status Code	Notes
					Sanborn	BERD			
4135-002-006	210 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1912				6z	Lack of Integrity
4135-004-005	428 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1913				6z	Lack of integrity, features appear to be recreated and/or applied
4136-015-013	409 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1914		7K, 87 EL SEGUNDO 11		6z	Lack of Integrity
4136-015-015	413 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1914		7K, 87 EL SEGUNDO 19		6z	Lack of integrity, features appear to be recreated and/or applied
4136-025-004	216 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1915	Yes		"Historic District"	3s/3cs/5s3/5d3	Gilbert Apartments, contributor to potential historic district
4136-026-001	146 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1915	Yes		"Historic District"	5d3	Contributor to potential historic district
4136-027-020	145 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1915	Yes		"Historic District"	5d3	Contributor to potential historic district
4136-016-006	350 RICHMOND ST EL SEGUNDO CA 90245	Residential	Five or more apartments	1918	No?			6z	Lack of integrity, altered, may have been moved
4136-024-008	209 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1920	Yes	7K, 87 EL SEGUNDO 12	"Historic District"	5d3	Contributor to potential historic district
4136-027-015	131 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1920	Yes		"Historic District"	5d3	Contributor to potential historic district
4135-002-010	205 STANDARD ST EL SEGUNDO CA 90245	Residential	Seven Units (Any Combination)	1920				6z	Lack of Integrity
4136-026-002	140 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1921	Yes		"Historic District"	5s3/5d3	State Theater, El Segundo Theater, Old Town Music Hall, contributor to potential historic district
4136-024-013	223 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1922	Yes		"Historic District"	5d3	Contributor to potential historic district
4136-027-011	115 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1922	Yes	7K, 87 EL SEGUNDO 6	"Historic District"	5d3	Contributor to potential historic district
4136-024-010	211 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1923	Yes		"Historic District"	5d3	Contributor to potential historic district
4136-025-020	118 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Store Combination	1923	Yes		"Historic District"	5d3	Contributor to potential historic district
4136-027-018	139 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1923	Yes		"Historic District"	5d3	Contributor to potential historic district
4136-027-019	143 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1923	Yes		"Historic District"	5d3	Contributor to potential historic district
4133-001-008	502 MAIN ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1923	No?	7K, 87 EL SEGUNDO 16		6z	Existing building may have enveloped a house, does not appear to date from 1923
4136-006-011	513 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1923	Yes			6z	Lack of Integrity
4136-024-014	225 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1924	Yes	7K, 87 EL SEGUNDO 17	"Historic District"	5d3	Contributor to potential historic district
4136-024-017	203 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1925	Yes		"Historic District"	3s/3cs/5s3/5d3	City Hall Annex, contributor to potential historic district
4136-024-015	202 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Store Combination	1925	Yes		"Historic District"	5d3	Contributor to potential historic district, substantially altered in 1945, but retains integrity from period of significance
4136-024-011	215 RICHMOND ST EL SEGUNDO CA 90245	Recreational	Organizations	1925	Yes	7K, 87 EL SEGUNDO 23	"Historic District"	6z	Non-contributor in potential historic district, substantially altered
4136-017-043	201 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1926	Yes			6z	Lack of integrity, features appear to be recreated and/or applied
4136-024-012	221 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1926	Yes		"Historic District"	6z	Non-contributor in potential historic district, substantially altered
4136-016-020	105 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Store Combination	1928	Yes			5s3	
4133-001-001	540 MAIN ST EL SEGUNDO CA 90245	Institutional	Churches	1928	Yes			6z	This is the third home of this congregation, which is the oldest in the city. The original portion of the building was completed in 1928. The Sunday School was expanded in 1955. The sanctuary was remodeled in 1958-61. The entire church building was remodeled again in 1977.
4136-016-033	351 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1935				6z	
4136-017-018	315 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1946				6z	
4136-017-019	319 RICHMOND ST EL SEGUNDO CA 90245	Residential	Three Units (Any Combination)	1946				6z	
4136-025-003	222 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1947			"Historic District"	5d3	Contributor to potential historic district
4136-016-031	343 MAIN ST EL SEGUNDO CA 90245	Commercial	Banks Savings & Loan	1947				6z	
4136-016-034	353 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1947				6z	
4136-017-050	327 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1947				6z	
4136-017-053	227 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Office Buildings	1947				6z	
4135-004-004	434 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1948				6z	
4136-015-018	425 MAIN ST EL SEGUNDO CA 90245	Commercial	Professional Buildings	1948				6z	
4136-017-057	219 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1948				6z	
4135-004-003	444 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1949		7K, 87 EL SEGUNDO 20		6z	
4136-015-019	427 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1949				6z	
4136-015-020	431 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1949				6z	
4136-015-021	433 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1949				6z	
4136-016-021	309 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1949				6z	
4136-016-022	315 MAIN ST EL SEGUNDO CA 90245	Commercial	Parking Lots (Commercial Use Properties)	1949				6z	
4136-016-032	347 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1949				6z	
4136-026-031	135 MAIN ST EL SEGUNDO CA 90245	Commercial	Professional Buildings	1949				6z	
4136-015-025	415 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1950		7K, 87 EL SEGUNDO 4		6z	
4136-016-030	339 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1950				6z	
4136-017-020	321 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1951				6z	
4136-017-051	323 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1951				6z	

APN	Full Address	Use Type	Use Description	Year Built	1929		2000 DSP	TGHP Preliminary Status Code	Notes
					Sanborn	BERD			
4136-026-033	139 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1951				6z	
4133-001-009	500 MAIN ST EL SEGUNDO CA 90245	Commercial	Professional Buildings	1952				6z	
4136-015-010	401 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1952				6z	
4136-015-022	439 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1952				6z	
4136-015-023	455 MAIN ST EL SEGUNDO CA 90245	Commercial	Professional Buildings	1952				6z	
4136-016-029	333 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1952				6z	
4136-006-012	515 MAIN ST EL SEGUNDO CA 90245	Residential	Single	1953				6z	
4136-006-020	501 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1953				6z	
4136-015-012	405 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1953		7K, 87 EL SEGUNDO 9		6z	
4135-001-001	150 MAIN ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1954				6z	
4135-004-007	424 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1954				6z	
4135-004-008	422 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1954				6z	
4135-004-009	410 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1954		7K, 87 EL SEGUNDO 10		6z	
4136-006-013	525 MAIN ST EL SEGUNDO CA 90245	Commercial	Professional Buildings	1954				6z	
4136-006-015	529 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1954				6z	
4136-015-011	403 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1954				6z	
4136-016-024	319 MAIN ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1954				6z	
4135-004-002	446 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1955				6z	
4136-016-026	321 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1955				6z	
4136-016-037	327 MAIN ST EL SEGUNDO CA 90245	Commercial	Professional Buildings	1955				6z	
4136-017-017	311 RICHMOND ST # D EL SEGUNDO CA 90245	Residential	Four Units (Any Combination)	1955				6z	
4136-026-032	137 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1955				6z	
4136-015-014	411 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1956				6z	
			Lgt Manf.Sm. EQPT. Manuf Sm.Shps Instr.Manuf. Prnt						
4136-026-027	111 MAIN ST EL SEGUNDO CA 90245	Industrial	Plnts	1956				6z	
4136-026-029	121 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1956		7K, 87 EL SEGUNDO 8		6z	
4135-004-028	400 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1957				6z	
4133-001-007	508 MAIN ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1958				6z	
4135-002-022	200 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1958				6z	
			Parking Lots (Commercial Use Properties)						
4136-024-009		Commercial	Properties)	1958				6z	
4136-026-028	117 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	1958		7K, 87 EL SEGUNDO 7		6z	
4135-004-001	450 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1959				6z	
4135-002-005	214 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1960				6z	
4136-017-047	337 RICHMOND ST EL SEGUNDO CA 90245	Institutional	Churches	1960				6z	
			Parking Lots (Commercial Use Properties)						
4136-017-054		Commercial	Properties)	1960				6z	
4133-001-002		Institutional	Churches	1961				6z	
4133-001-003		Institutional	Churches	1961				6z	
4136-017-046	361 RICHMOND ST EL SEGUNDO CA 90245	Institutional	Churches	1962				6z	
4135-006-015	201 E GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1962				6z	
			Parking Lots (Commercial Use Properties)						
4136-016-038		Commercial	Properties)	1963				6z	
4136-017-052	331 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	1963				6z	
4136-017-016	305 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Stores	1964				6z	
4135-002-019	222 MAIN ST EL SEGUNDO CA 90245	Commercial	Service Stations	1965				6z	
4136-016-057	300 RICHMOND BLVD EL SEGUNDO CA 90245	Commercial	Supermarkets	1965				6z	
4136-024-001	210 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1965				6z	
4135-007-027	220 E GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1965				6z	
			Lgt Manf.Sm. EQPT. Manuf Sm.Shps Instr.Manuf. Prnt						
4135-001-035	140 MAIN ST EL SEGUNDO CA 90245	Industrial	Plnts	1966				6z	
4135-007-026	202 E GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1966				6z	
4136-026-030	123 MAIN ST EL SEGUNDO CA 90245	Commercial	Restaurants, Cocktail Lounges	1967				6z	
4136-017-027	343 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1968		7K, 87 EL SEGUNDO 13		6z	
4135-001-038	134 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1969				6z	
			Clubs., Lodge Halls, Fraternal Organizations						
4133-001-004	520 MAIN ST EL SEGUNDO CA 90245	Recreational	Organizations	1975				6z	
4135-002-002	110 E GRAND AVE EL SEGUNDO CA 90245	Commercial	Store Combination	1976				6z	

APN	Full Address	Use Type	Use Description	Year Built	1929		2000 DSP	TGHP Preliminary Status Code	Notes
					Sanborn	BERD			
4135-002-008	201 STANDARD ST EL SEGUNDO CA 90245	Commercial	Office Building	1979				6z	
4136-025-019	215 MAIN ST EL SEGUNDO CA 90245	Commercial	Shopping Centers	1983				N/A	
4133-001-021	512 MAIN ST EL SEGUNDO CA 90245	Commercial	(Neighborhood, community) Office Buildings	1985				N/A	
4135-001-040	130 MAIN ST EL SEGUNDO CA 90245	Commercial	Stores	1986				N/A	
4136-017-022	325 RICHMOND ST EL SEGUNDO CA 90245	Residential	Three Units (Any Combination)	1986				N/A	
4136-027-021	147 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1988				6z	Non-contributor in potential historic district
4135-001-039	136 MAIN ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1988				N/A	
4135-002-020	130 E GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	1989				6z	
4135-001-012		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-013		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-014		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-015		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-016		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-017		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-018		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-019		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4135-001-020		Commercial	Parking Lots (Commercial Use Properties)	1989				N/A	
4136-016-035	361 MAIN ST EL SEGUNDO CA 90245	Commercial	Office Buildings	1989			7K, 87 EL SEGUNDO 3 building recorded was presumably demolished	N/A	
4136-027-010		Commercial	Parking Lots (Commercial Use Properties)	1991				N/A	
4135-002-004	218 MAIN ST EL SEGUNDO CA 90245	Commercial	Service Stations	1999				N/A	
4136-026-039	141 MAIN ST EL SEGUNDO CA 90245	Commercial	Commercial	1999				N/A	
4136-017-067		Commercial	Office Buildings	2002				N/A	
4136-017-068		Commercial	Office Buildings	2002				N/A	
4136-017-069		Commercial	Office Buildings	2002				N/A	
4136-016-058	121 W GRAND AVE EL SEGUNDO CA 90245	Commercial	Stores	2003				N/A	
4136-027-032	127 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	2004			"Historic District"	6z	Original building apparently demolished, non-contributor in potential historic district
4136-027-033	125 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	2004			"Historic District"	6z	Original building apparently demolished, non-contributor in potential historic district
4136-027-034	123 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	2004			7K, 87 EL SEGUNDO 15 "Historic District"	6z	Original building apparently demolished, non-contributor in potential historic district
4136-027-035	121 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	2004				6z	Non-contributor in potential historic district
4135-004-006	426 MAIN ST EL SEGUNDO CA 90245	Commercial	Store Combination	2006				N/A	
4135-002-021	208 MAIN ST EL SEGUNDO CA 90245	Commercial	Commercial	2012			7K, 87 EL SEGUNDO 1; building recorded was presumably demolished	N/A	
4136-027-016	133 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Store Combination	2016				6z	Non-contributor in potential historic district
4136-027-017	135 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Office Buildings	2018				6z	Non-contributor in potential historic district
4135-003-901	350 MAIN ST EL SEGUNDO CA 90245	Public	City Hall, Police Station, Fire Department					6z	Need dates of construction from City
4135-002-009		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4135-001-011		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4135-003-901		Government	Government Parcel					N/A	
4135-004-900		Commercial	Parking Lots (Commercial Use Properties)					N/A	

APN	Full Address	Use Type	Use Description	Year Built	1929		2000 DSP	TGHP Preliminary Status Code	Notes
					Sanborn	BERD			
4136-006-900		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-025-900		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-003		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-004		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-005		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-006		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-007		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-008		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-009		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-010		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-011		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-012		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-013		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-014		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-015		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-016		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-017	102 RICHMOND ST EL SEGUNDO CA 90245	Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-018		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-019		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-020		Commercial	Parking Lots (Commercial Use Properties)					N/A	
4136-026-021		Commercial	Parking Lots (Commercial Use Properties)					N/A	

APPENDIX D.2: PALEONTOLOGICAL RESOURCES LETTER

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

December 11, 2022

EcoTierra Consulting
Attn: Katrina Hardt-Holoch

re: Paleontological resources for an unnamed Project in Downtown El Segundo, California

Dear Katrina:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the project area as outlined on the portion of the Venice USGS topographic quadrangle map that you sent to me via e-mail on December 6, 2022. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

Locality Number	Location	Formation	Taxa	Depth
LACM IP 34957	El Segundo Power Generating Station; Water line trench on Franklin Ave., approx. 10 feet E of Standard St.	Marine Terrace (late Pleistocene; massive, light brown to reddish-brown sand)	Pismo clam (<i>Tivela stultorum</i>) and other invertebrates	3 feet bgs
LACM IP 34958	El Segundo power generating station	Palos Verdes Sand / San Pedro Formation (well bedded, yellow-tan to green-grey sand)	Invertebrates (unspecified)	20 feet bgs
LACM VP 3264	Los Angeles International Airport	Unknown formation (Pleistocene sands)	Elephant clade (Proboscidea)	25 feet bgs
LACM VP 7332	Westchester, NW of intersection of West Century Blvd & Bellanca Ave	Unknown formation (Pleistocene; silty sand)	Mammoth (<i>Mammuthus</i>)	40 feet bgs
LACM VP 3789	8734 Bellanca Avenue, Westchester	Unknown (Pleistocene; pebbly gray-green to brown mud that	Mammoth (<i>Mammuthus</i>)	14 feet bgs

		directly overlies a gray-green fine sand)		
		Unknown formation (Pleistocene, massive sandy mudstone w scattered pieces of gravel)	Mammoth (<i>Mammuthus</i>); bison (<i>Bison</i>); hare (<i>Lepus</i>)	16 feet bgs
LACM VP 4942	SE corner of Airport Blvd. & Manchester Ave			

VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,



Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice

**APPENDIX D.3: SOUTH COASTAL
INFORMATION CENTER
LETTER**

South Central Coastal Information Center

California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395

California Historical Resources Information System
Los Angeles, Orange, Ventura and San Bernardino Counties
sccic@fullerton.edu

6/26/2023

SCCIC File #: 24373.10646

Katrina Hardt-Holoch
EcoTierra Consulting
2244 Oak Grove Road, #30178
Walnut Creek CA 94598

Re: Record Search Results for Various APNs in Downtown El Segundo

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Venice, CA USGS 7.5' quadrangle. The following summary reflects the results of the records search for the project area and a ½-mile radius. The search includes a review of all recorded archaeological and built-environment resources as well as a review of cultural resource reports on file. In addition, the California Points of Historical Interest (SPHI), the California Historical Landmarks (SHL), the California Register of Historical Resources (CAL REG), the National Register of Historic Places (NRHP), and the California State Built Environment Resources Directory (BERD) listings were reviewed for the above referenced project site and a ¼-mile radius. Due to the sensitive nature of cultural resources, archaeological site locations are not released.

RECORDS SEARCH RESULTS SUMMARY

Archaeological Resources* (*see Recommendations section)	Within project area: 0 Within project radius: 0
Built-Environment Resources	Within project area: 1 Within project radius: 5
Reports and Studies	Within project area: 3 Within project radius: 14
OHP Built Environment Resources Directory (BERD) 2019	Within project area: 22 Within ¼-mile radius: 1
California Points of Historical Interest (SPHI) 2019	Within project area: 0 Within ¼-mile radius: 0
California Historical Landmarks (SHL) 2019	Within project area: 0 Within ¼-mile radius: 0
California Register of Historical Resources (CAL REG) 2019	Within project area: 0 Within ¼-mile radius: 0
National Register of Historic Places (NRHP) 2019	Within project area: 0 Within ¼-mile radius: 0

HISTORIC MAP REVIEW - Redondo, CA (1896, 1944) 15' USGS historic maps indicate that in 1896 there was no visible development within the project area. There were two roads within the project area which was located within the historic place name of Sausal Redondo. In 1944, there was a significant increase in development with a dense grid-like network of roads and buildings within the project area and search radius. The Pacific Electric rail line extends into the project area and continues eastward. There were two water features or small lakes and several branches of the AT&SF in the southern portion of the project search radius. Two churches and two schools were located north of the project area. Major road names included El Segundo Blvd.

RECOMMENDATIONS

**When we report that no archaeological resources are recorded in your project area or within a specified radius around the project area; that does not necessarily mean that nothing is there. It may simply mean that the area has not been studied and/or that no information regarding the archaeological sensitivity of the property has been filed at this office. The reported records search result does not preclude the possibility that surface or buried artifacts might be found during a survey of the property or ground-disturbing activities.*

The archaeological sensitivity of the project location is unknown because there are no previous studies for the subject property. While there are currently no recorded archaeological sites within the project area, buried resources could potentially be unearthed during project activities. Therefore, it is recommended that a qualified archaeological consultant be retained to survey the property for cultural resources prior to the approval of project plans. Excavation or removal of potential cultural resources should not be attempted by project personnel.

It is also recommended that the Native American Heritage Commission be consulted to identify if any additional traditional cultural properties or other sacred sites are known to be in the area. The NAHC may also refer you to local tribes with particular knowledge of potential sensitivity. The NAHC and local tribes may offer additional recommendations to what is provided here and may request an archaeological monitor.

Finally, it is also recommended that any built-environment resources (within the project area and the area of potential effect) be identified, recorded, and evaluated for local, state, or national significance by a qualified architectural historian prior to the approval of project plans. This includes any human-built resource that appears (or are known to be) more than 45 years of age.

For your convenience, you may find a professional consultant** at www.chrisinfo.org. Any resulting reports by the qualified consultant should be submitted to the South Central Coastal Information Center as soon as possible.

**The SCCIC does not endorse any particular consultant and makes no claims about the qualifications of any person listed. Each consultant on this list self-reports that they meet current professional standards.

If you have any questions regarding the results presented herein, please contact the office at 657.278.5395 Monday through Thursday 9:00 am to 3:30 pm. Should you require any additional information for the above referenced project, reference the SCCIC number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the [California Historical Resources Information System](#),

Stacy St. James
Digitally signed
by Stacy St. James
Date: 2023.06.26
14:00:23 -07'00'

Isabela Kott
GIS Program Specialist

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the California Historical Resources Information System (CHRIS) Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

The California Office of Historic Preservation (OHP) contracts with the California Historical Resources Information System's (CHRIS) regional Information Centers (ICs) to maintain information in the CHRIS inventory and make it available to local, state, and federal agencies, cultural resource professionals, Native American tribes, researchers, and the public. Recommendations made by IC coordinators or their staff regarding the interpretation and application of this information are advisory only. Such recommendations do not necessarily represent the evaluation or opinion of the State Historic Preservation Officer in carrying out the OHP's regulatory authority under federal and state law.

APPENDIX E: ENERGY CALCULATIONS

Construction Transportation Energy Worksheet

Emission Source	Emissions (MTCO ₂) ¹	
	Diesel-Powered	Gasoline-Powered
Demolition (2024)		
Off-Road	26.1	--
Vendor	0.00	--
Hauling	49.0	--
Worker	--	1.80
Grading (2024)		
Off-Road	25.7	--
Vendor	0.00	--
Hauling	0.00	--
Worker	--	1.44
Building Construction (2024)		
Off-Road	164	--
Vendor	27.5	--
Hauling	0.00	--
Worker	--	41.1
Paving (2024)		
Off-Road	4.51	--
Vendor	0.00	--
Hauling	0.00	--
Worker	--	0.78
Architectural Coating (2024)		
Off-Road	1.40	--
Vendor	0.00	--
Hauling	0.00	--
Worker	--	0.95
<i>Total Emissions in MTCO₂</i>	<i>298.21</i>	<i>46.07</i>
<i>Total Emissions in pounds CO₂</i> ²	<i>657,553</i>	<i>101,584</i>
<i>Fuel Consumption (10% of SPU Build-Out)</i> ³	<i>29,670 gallons</i>	<i>5,183 gallons</i>
Fuel Consumption (Full Build-Out)	296,700 gallons	51,830 gallons
<p><i>MTCO₂ = metric tons of carbon dioxide</i></p> <p><i>1 MTCO₂ emissions for each phase of construction taken from the CalEEMod output sheets prepared for the Project.</i></p> <p><i>2 1 MT of CO₂ = 2,205 pounds of CO₂.</i></p> <p><i>3 Diesel fuel has a CO₂ factor of 22.14 pounds of CO₂ per 1 gallon of diesel fuel. Gasoline has a CO₂ factor of 19.6 pounds of CO₂ per 1 gallon of gasoline. Source: U.S. Energy Information Administration, Environment Carbon Dioxide Emissions Coefficients, Release date: February 2, 2016.</i></p>		

APPENDIX F: GREENHOUSE GAS STUDY

Greenhouse Gases Study

El Segundo Downtown Specific Plan Update Project

September 13, 2023

noah tanski environmental consulting

email: noah@ntenvironmental.net

call/text: 310-722-6346

1. Introduction

This report evaluates the direct and indirect impacts of the El Segundo Downtown Specific Plan Update Project (Project) related to greenhouse gas (GHG) emissions and global climate change. Supporting documents – such as calculation worksheets and modeling outputs – are included in the appendix to this report.

2. Project Description

The Project involves an update to the City’s adopted Downtown Specific Plan that would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes. The Project would allow for increases of up to 130,000 square feet of retail and restaurant uses, 200,000 square feet of office uses, 24,000 square feet of medical office uses, and 300 residential uses. Mobility enhancements would include expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which could affect the number of travel lanes on those streets. The Project would potentially relocate a portion of an existing truck route that is located on Main Street. It proposes the potential permanent closure of a portion of Richmond Street to vehicles, and a variety of other minor pedestrian and transit improvements (e.g., widened sidewalks, expanded outdoor seating and dining areas, bus stop enhancements, etc.). The Project would also include modifications to parking standards and strategies, as well as alternatives for on-street parking. Relatedly, the Project may potentially involve the construction of two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue.

3. Environmental Setting

3.1 Climate Change Background

Global climate change refers to changes in average climatic conditions on Earth as a whole, including changes in temperature, wind patterns, precipitation, and storms. Global warming, a related concept, is the observed increase in average temperature of Earth’s surface and atmosphere. One identified cause of global warming is an increase of GHG emissions in the atmosphere. GHG emissions are those compounds in Earth’s atmosphere that play a critical role in determining Earth’s surface temperature.

Earth’s natural warming process is known as the “greenhouse effect.” It is called the greenhouse effect because Earth and the atmosphere surrounding it are similar to a greenhouse with glass panes in that the glass allows solar radiation (sunlight) into Earth’s atmosphere but prevents radiative heat from escaping, thus warming Earth’s atmosphere. Some levels of GHG emissions keep the average surface temperature of Earth close to a hospitable 60 degrees Fahrenheit. However, it is believed that excessive concentrations of anthropogenic GHG emissions in the

atmosphere can result in increased global mean temperatures, with associated adverse climatic and ecological consequences.

3.2 GHG Emissions Background

GHG emissions include carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃).¹ Carbon dioxide is the most abundant GHG. Other GHG emissions are less abundant but have greater global warming potential than CO₂. Thus, emissions of other GHGs are frequently expressed in their equivalent mass of CO₂, denoted as CO₂e. Forest fires, decomposition, industrial processes, landfills, and the consumption of fossil fuels for power generation, transportation, heating, and cooking are the primary sources of GHG emissions.

3.3 Regulatory Framework

There are any number of agreements, strategies, policies, regulations, and standards that relate to GHG emissions – from international climate accords to local climate action plans. Below is a discussion of (1) the plans, policies, and regulations (collectively, the “Applicable GHG Regulations”) that are fundamental to determining whether the Project would have a significant impact on GHG emissions, and (2) the existing conditions under the Applicable GHG Regulations.

3.3.1 State

The State legislature, executive office, and administrative agencies have promulgated various regulations, rules, policies, and strategies that govern GHG emissions. Below is a timeline thereof, followed by explanations of each:

- June 2005: Executive Order S-3-05 (EO S-3-05)
- September 2005: Assembly Bill 32 (AB 32) (codified EO S-3-05)
- August 2007: Senate Bill 97 (SB 97)
- September 2008: Senate Bill 375 (SB 375)
- December 2008: CARB adopts Climate Change Scoping Plan (the “AB 32 Scoping Plan” or 2008 Scoping Plan)
- August 2011: CARB adopts Supplemental Functional Equivalent Document to the Climate Change Scoping Plan (the “Supplemental FED”)
- May 2014: CARB adopts First Update to the Climate Change Scoping Plan: Building on the Framework (the “First Update” or 2013 Scoping Plan Update)
- April 2015: Executive Order B-30-15 (EO B-30-15)
- September 2016: Senate Bill 32 (SB 32) (codified EO B-30-15)
- November 2017: CARB adopts the 2017 Climate Change Scoping Plan Update: The Strategy for Achieving California’s 2030 Greenhouse Gas Target (the “2017 Scoping Plan Update”)
- September 2018: Executive Order B-55-18 (EO B-55-18)
- September 2022: Assembly Bill 1297 (AB 1297) (codified EO B-55-18)

¹ As defined by California Assembly Bill (AB) 32 and Senate Bill (SB) 104.

- November 2022: CARB adopts the 2022 Scoping Plan for Achieving Carbon Neutrality (the “2022 Scoping Plan Update”)

Other regulations would also have an indirect effect on the Project’s GHG emissions. The Project’s relation to the following regulations would not be determinative of its CEQA significance, but explanations of these regulations are nonetheless provided below for informational purposes:

- SB 350, the Clean Energy and Efficiency Act of 2015
- Cap-and-Trade Program

3.3.1.1 EO S-3-05

In June 2005, Governor Arnold Schwarzenegger signed EO-S-3-05, which had the goal of reducing the State’s GHG emissions to 2000 levels by 2010, to 1990 levels by 2020, and to 80 percent below 1990 levels by 2050.

3.3.1.2 AB 32

In September 2005, Governor Schwarzenegger signed the California Global Warming Solutions Act of 2006, AB 32, into law. AB 32 committed the State to achieving the following:

- By 2010, reduce statewide GHG emissions to 2000 levels.²
- By 2020, reduce statewide GHG emissions to 1990 levels.

AB 32 required the California Air Resources Board (CARB) to adopt rules and regulations that achieve the maximum technologically feasible and cost-effective GHG emissions reductions. The State achieved its 2020 GHG emissions target of returning to 1990 levels four years earlier than mandated by AB 32.

3.3.1.3 SB 97

Passed in August 2007, SB 97 required the State Office of Planning and Research (OPR) to prepare and develop CEQA guidelines for the effects and/or mitigation of GHG emissions, including effects associated with transportation and energy consumption. Subsequently, the Draft Guidelines Amendments for Greenhouse Gas Emissions (the “Guidelines Amendments”) were adopted in December 2009 to address the specific obligations of public agencies when analyzing GHG emissions to determine a project’s effect on the environment, as pursuant to CEQA.

The Guidelines Amendments do not provide thresholds of significance or any specific mitigation measures; rather, they require a lead agency to make a good-faith effort to describe, calculate, or estimate the amount of GHG emissions that would result from a project, to the extent possible based on scientific and factual data. The Guidelines Amendments give discretion to the lead agency whether to (1) use a model or methodology to quantify GHG emissions resulting from a project, and which model or methodology to use, or (2) rely on a qualitative analysis or performance-based standards. Additionally, three factors that should be considered in the evaluation of the significance of GHG emissions are identified:

² The 2010 target to reduce GHG emissions to 2000 levels was not met.

- (1) The extent to which a project may increase or reduce GHG emissions as compared to the existing environmental setting;
- (2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project; and
- (3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The administrative record for the Guidelines Amendments also clarifies “that the effects of greenhouse gas emissions are cumulative and should be analyzed in the context of CEQA’s requirements for the cumulative impact analysis.”³

The California Natural Resources Agency is required to periodically update the Guidelines Amendments to incorporate new information or criteria established by CARB pursuant to AB 32. SB 97 applies to any environmental impact report (EIR), negative declaration, mitigated negative declaration, or other document requirement by CEQA.

3.3.1.4 SB 375

In September 2008, Governor Schwarzenegger signed SB 375, the Sustainable Communities and Climate Protection Act of 2008, to align regional planning for housing and transportation with the GHG reduction goals outlined by AB 32. SB 375 requires each Metropolitan Planning Organization (MPO) to adopt a Sustainable Community Strategy (SCS) encouraging compact development that reduces passenger vehicle miles traveled (VMT) and trips, all for the purpose of meeting CARB-determined regional GHG emissions reduction targets.

3.3.1.5 EO-B-30-15

In April 2015, Governor Jerry Brown issued EO B-30-15, which had the goal of reducing the State’s GHG emissions to 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050.

3.3.1.6 SB 32

Signed in September 2016 by Governor Brown, SB 32 updates AB 32 to include an emissions reduction goal for the year 2030. Specifically, SB 32 requires CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030. New goals outlined in SB 32 update AB 32’s scoping plan requirement and involve increasing renewable energy use, imposing tighter limits on the carbon content of gasoline and diesel fuel, putting more electric cars on the road, improving energy efficiency, and curbing emissions from key industries.

³ Letter from Cynthia Bryant, Director of the Governor’s Office of Planning and Research, to Mike Chrisman, California Secretary for Natural Resources, dated 13 April 2009.

3.3.1.7 EO B-55-18

On September 10, 2018, Governor Brown issued EO B-55-18, which established a target for California to achieve carbon net neutrality by 2045. EO B-55-18 identifies the statewide goal to achieve and maintain carbon neutrality as soon as possible, and no later than 2045.

3.3.1.8 AB 1297

Governor Gavin Newsom codified the goals outlined in EO-B-55-18 by his signing of AB 1279 in September 2022. AB 1279 requires the state to reduce statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels and to maintain net negative GHG emissions thereafter. AB 1279 tasks CARB with monitoring and regulating GHG emissions to achieve this goal. AB 1297 represents the State's latest – and most stringent – GHG reduction target.

3.3.1.9 SB 350

SB 350, signed October 7, 2015, is the Clean Energy and Pollution Reduction Act of 2015. The objectives of SB 350 are: (1) to increase the procurement of electricity from renewable resources from 33 percent to 50 percent by 2030, and (2) to double the energy efficiency savings in electricity and natural gas final end uses of retail customers through energy efficiency and conservation.⁴

3.3.1.10 Cap-and-Trade Program

The Scoping Plans identify the Cap-and-Trade Program as one of the strategies California will employ to reduce GHG emissions. Under Cap-and-Trade, an overall limit on GHG emissions from capped sectors is established, and facilities subject to the cap are able to trade permits to emit GHGs. CARB designed and adopted the California Cap-and-Trade Project pursuant to its authority under AB 32.

3.3.2 Climate Change Scoping Plan

3.3.2.1 AB 32 Scoping Plan

In 2008, CARB approved a Climate Change Scoping Plan (the "AB 32 Scoping Plan") detailing the approach that California would take to reduce its GHG emissions to 1990 levels by 2020, as required by AB 32. To achieve this, CARB determined that an approximate 28.5 percent reduction in GHG emissions would be necessary. That is, projected 2020 GHG emissions (i.e., emissions that would occur in 2020, absent any GHG-reducing laws and regulations) would have to be reduced by 28.5 percent.

3.3.2.2 Supplemental FED

Shortly after the adoption of the 2008 Scoping Plan, a lawsuit was filed challenging CARB's approval of the Climate Change Scoping Plan Functional Equivalent Document. In May 2011, it was found that the environmental analysis of this document's alternatives was not sufficient under CEQA. In response to this ruling, CARB prepared a revised and expanded document, the Supplemental FED, approved in August 2011.

⁴ Senate Bill 350 (2015-2016 Re. Session) Stats 2015, ch. 547.

As part of the Supplemental FED, CARB updated the projected 2020 emissions inventory based on then-current economic forecasts (i.e., as influenced by the economic downturn) and GHG emissions reduction measures already in place.⁵ Ultimately, CARB determined that achieving the 1990 emissions levels by 2020 would require a reduction in GHG emissions of 16 percent from business-as-usual (BAU) conditions, down from the previous 28.5 percent figure.

3.3.2.3 First Update

CARB adopted the First Update in 2014, which found that California was on track to meet AB 32's 2020 emissions reduction mandate and determined that, by 2030, the state could reduce its GHG emissions to levels on course with those needed to achieve the 2050 target if the state realized the expected benefits of its existing policy goals.⁶ CARB further identified and developed recommended actions for six focus areas key to achieving the 2050 target: (1) energy; (2) transportation (vehicles/equipment, sustainable communities, housing, fuels, and infrastructure); (3) agriculture; (4) water; (5) waste management; and (6) natural and working lands. As noted earlier, the state achieved its 2020 target that was established by AB 32.

3.3.2.4 2017 Scoping Plan

In response to the passage of SB 32 and the identification of the 2030 GHG reduction target, CARB adopted an update, the 2017 Scoping Plan. It built upon the successful framework established by the AB 32 Scoping Plan and the First Update and identified new, technologically feasible, and cost-effective strategies to ensure that the state meets its GHG reduction targets in a way that promotes and rewards innovation, continues to foster economic growth, and delivers improvements to the environment and public health. It includes policies to require direct GHG emissions reductions at some of the state's largest stationary sources and mobile sources, such as the use of lower GHG fuels, efficiency regulations, and the cap-and-trade program (the "Cap-and-Trade Program"), or carbon tax, which constrains and reduces emissions at covered sources.

CARB's 2030 emissions projections for the state take into account 2020 GHG reduction policies and programs, including the following:

- Addressing GHG emissions from natural and working lands of California, which include the agriculture and forestry sectors.
- Continuation of the Cap-and-Trade Program, which is expected to cover most of the 2030 reduction obligation, or approximately 34 to 79 million metric tons of CO₂ equivalent (MMTCO₂e).

⁵ E.g., the million-solar-roofs program, Assembly Bill 1493 (Pavley I) motor vehicle GHG emissions standards, and the Low Carbon Fuel Standard (LCFS). Pavley I, the first GHG standard in the nation for passenger vehicles, took effect for model years starting in 2009 to 2016 and was therefore in place at the time of the 2011 Supplemental FED.

⁶ The 2050 goal of reducing GHG emissions to 80 percent below 1990 levels was originally established by Executive Order S-3-05, issued by Governor Schwarzenegger in June 2005. However, the 2050 goal was not codified by either AB 32 or SB 32.

- The state's short-lived climate pollutants strategy, which addresses GHG emissions that remain in the atmosphere for shorter periods of time than longer-lived GHGs like CO₂, is expected to cover approximately 17 to 35 MMTCO₂e.
- The Renewables Portfolio Standard (RPS) with its goal of 50 percent renewable electricity by 2030 is expected to cover approximately 3 MMTCO₂e.
- The mobile source strategy and sustainable freight action plan are expected to cover approximately 11 to 13 MMTCO₂e.
- Doubling the energy efficiency savings in natural gas and electricity end uses by 2030 that is expected to cover approximately 7 to 9 MMTCO₂e of the 2030 reduction obligation.
- Other strategies would be expected to cover the remaining 2030 reduction obligations.

The 2017 Scoping Plan also addresses the role of local governments in meeting the state's GHG reduction goals, because local governments have jurisdiction and land use authority related to community-scale planning and permitting processes, local codes and actions, outreach and education programs, and municipal operations. Furthermore, local governments may have the ability to incentivize renewable energy, energy efficiency, and water efficiency measures. For individual projects under CEQA, the 2017 Scoping Plan states that local governments can support climate action when considering discretionary approvals and entitlements. According to the 2017 Scoping Plan, lead agencies have the discretion to develop evidence-based numeric thresholds consistent with the Scoping Plan, the state's long-term goals, and climate change science. However, the City of El Segundo has not developed such thresholds for CEQA use.

3.3.2.5 2022 Scoping Plan

The 2022 Scoping Plan establishes a scenario by which the State may achieve carbon neutrality by 2045 or earlier, and it outlines a technologically feasible, cost-effective, and equity-focused path for achieving this climate target. The 2022 Scoping Plan addresses the latest climate-related legislation and direction from current Governor Newsom, who, by his signing of AB 1279, required the State to reduce statewide anthropogenic GHG emissions to at least 85 percent below 1990 levels by 2045 and to maintain net negative GHG emissions thereafter. The 2022 Scoping Plan relies on the aggressive reduction of fossil fuels in all statewide sectors and accelerating existing carbon reduction programs. Aspects of the 2022 Scoping Plan's scenario include:

- Rapidly moving to zero-emission transportation by electrifying cars, buses, trains, and trucks.
- Phasing out the use of fossil gas used for heating homes and buildings.
- Clamping down on chemicals, refrigerants, and other high global warming potential gases.
- Providing communities with sustainable options for walking, biking, and public transit to reduce reliance on cars.

- Continuing to develop solar arrays, wind turbine capacity, and other resources that provide clean, renewable energy.
- Scale up options such as renewable hydrogen and biomethane for end uses that are hard to electrify.

CARB estimates that successfully achieving the outcomes called for by the 2022 Scoping Plan will reduce demand for liquid petroleum by 94 percent and total fossil fuel by 86 percent in 2045, relative to 2022. The 2022 Scoping Plan also emphasizes the role of natural and working lands and carbon capturing technologies to address residual emissions and achieve net negative emissions.

3.3.3 Regional

3.3.3.1 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

In September 2008 Governor Schwarzenegger signed the Sustainable Communities and Climate Protection Act of 2008, also known as SB 375, to align regional planning for housing and transportation with the GHG emissions reduction goals outlined by AB 32. SB 375 requires each MPO to adopt an SCS encouraging compact development that reduces passenger VMT and trips, all for the purpose of meeting CARB-determined regional GHG emissions reduction targets.

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties, and addresses regional issues relating to transportation, the economy, community development, and the environment. As the federally designated MPO for the six-county Southern California region, SCAG is required by law to ensure that transportation activities conform to, and are supportive of, regional and state air quality plan goals to attain NAAQS. SCAG is also a co-producer, with the South Coast Air Quality Management District (SCAQMD), of the transportation strategy and transportation control measure sections of the Basin's AQMP.

CARB set GHG emissions reduction targets of 8 percent by 2020 and 19 percent by 2035 (compared with 2005 levels) for the SCAG region, effective as of October 1, 2018. Adopted on September 3, 2020, SCAG's long-range plan, the 2020-2045 RTP/SCS serves as the roadmap to fulfilling the region's compliance with these latest GHG reduction targets. To this end, the 2020-2045 RTP/SCS recognizes that transportation investments and future land use patterns are inextricably linked and acknowledges how this relationship can help the region make choices that sustain existing resources while expanding efficiency, mobility, and accessibility for people across the region.

The 2020-2045 RTP/SCS land use pattern continues the trend of focusing new housing and employment growth in the region's Priority Growth Areas (PGAs) and aims to enhance and build out the region's transit network. PGA's such as Job Centers, Transit Priority Areas (TPAs), High Quality Transit Areas (HQTAs), Neighborhood Mobility Areas (NMAs), Livable Corridors, and Spheres of Influence (SOIs) account for just 4 percent of total land in the SCAG region, but they are projected to accommodate 64 percent of the region's future household growth and 74 percent

of the region's future employment growth by 2045.⁷ According to the 2020-2045 RTP/SCS, dense infill development in PGAs can help reduce travel distances, increase mobility options, leverage transit investments, and improve access to workplaces and other destinations, reducing vehicle miles traveled (VMT) and, crucially, associated GHG emissions.

The SB 375 GHG reduction targets for the SCAG region correspond with reductions in regional VMT per capita. OPR has recommended that achieving 15 percent lower per capita (residential) or per employee (commercial) VMT than existing development is generally feasible and is supported by evidence that connects these reductions to the state's emissions goals.

3.3.3.2 SCAQMD CEQA Guidance

The City of El Segundo is located in the South Coast Air Basin (Basin). The SCAQMD is responsible for air quality planning in the Basin and developing rules and regulations to bring the area into attainment of the ambient air quality standards. This is accomplished through air quality monitoring, evaluation, education, implementation of control measures to reduce emissions from stationary sources, permitting and inspection of pollution sources, enforcement of air quality regulations, and by supporting and implementing measures to reduce emissions from motor vehicles.

In 2008, SCAQMD released draft guidance regarding interim CEQA GHG significance thresholds.⁸ A GHG Significance Threshold Working Group (the "Working Group") was formed to further evaluate potential GHG significance thresholds.⁹ The SCAQMD proposed the use of a percent emission reduction target to determine significance for commercial/residential projects that emit greater than 3,000 MTCO₂e per year. Under this proposal, commercial/residential projects that emit fewer than 3,000 MTCO₂e per year would be assumed to have a less than significant impact on climate change.

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold of 10,000 MTCO₂e per year for stationary source/industrial projects where the SCAQMD is the lead agency. The SCAQMD has yet to adopt a GHG significance threshold for land use development projects (e.g., residential/commercial projects) or plan level projects. The Working Group's proposed GHG thresholds for project-level analyses and GHG efficiency thresholds for plan-level analyses were not adopted by the SCAQMD Governing Board. The Working Group has been inactive since 2011, and SCAQMD has not formally adopted any other GHG significance thresholds for other jurisdictions.

⁷ SCAG, Final 2020-2045 RTP/SCS, September 2020.

⁸ SCAQMD, Board Meeting, December 5, 2008. Agenda No. 31, <http://www3.aqmd.gov/hb/2008/081231.a.thm>. Accessed August 9, 2023.

⁹ SCAQMD, Greenhouse Gases CEQA Significance Thresholds, <http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds>. Accessed August 9, 2023.

3.3.4 Local

3.3.4.1 City of El Segundo Climate Action Plan

In December 2017 the City adopted a Climate Action Plan (CAP) to quantify the City's GHG emissions, identify community-wide strategies to lower the City's GHG emissions, and develop an implementation plan for these strategies.¹⁰ The CAP is not CEQA-qualified under the requirements of CEQA Guidelines Section 15183.5 but nevertheless identifies how the City may reduce its GHG emissions in line with the State's AB 32 targets. The CAP determines that implementation of five source strategies – Land Use and Transportation, Energy Efficiency, Solid Waste, Urban Greening, and Energy Generation and Storage – would reduce the City's GHG emissions to 49 percent below 2005 levels by 2035 and put the City “on a path” towards reducing emissions 80 percent below 1990 levels by 2050.

3.3.4.2 City of El Segundo General Plan

The City does not have a General Plan Element that is specific to climate change or GHG emissions, but the following goals, objectives, and policies would nevertheless have an indirect effect on GHG emissions reductions:

Goal AQ1: Person Work Trip Reduction for Private Employees

Objective AQ1-1: A 30 percent reduction in private employee work trips in new and existing development through the use of any combination of alternate work weeks and telecommuting strategies.

Policy AQ1-1.1: It is the policy of the City of El Segundo that the City encourage businesses to adopt alternative work schedules and prepare guidelines to assist local businesses in the implementation of alternative work schedule programs.

Policy AQ1-1.2: It is the policy of the City of El Segundo that businesses be encouraged to establish and maintain telecommuting or work-at-home programs to reduce employee work trips.

Policy AQ1-1.3: It is the policy of the City of El Segundo that Transportation System Management (TSM) plans provide a 30 percent reduction in vehicle ridership or the equivalent Average Vehicle Ridership (AVR) per commute vehicle.

Goal AQ2: Person Work Trip Reduction for Local Government Employees

Objective AQ2-1: A 30 percent reduction in local government employee work trips using any combination of alternative work weeks and telecommuting strategies.

Policy AQ2-1.1: It is the policy of the City of El Segundo that a study be conducted to implement alternative work schedules and work-at-home programs for City

¹⁰ City of El Segundo, Climate Action Plan, December 2017.

employees that will maximize the potential for increasing employee productivity.

Policy AQ2-1.2: It is the policy of the City of El Segundo that the City designate an Employee Transportation Coordinator to promote and institute ridesharing and other programs to achieve a 30 percent reduction in vehicle ridership for City employees.

Goal AQ3: Vehicle Work Trip Reduction for Private Employees

Objective AQ3-1: Increase the proportion of work trips made by transit.

Policy AQ3-1.1: It is the policy of the City of El Segundo that the City continue to require employers in existing congested areas of the City and developers of large new developments to adopt Transportation System Management (TSM) plans and provide incentives for the provision of transit support facilities.

Policy AQ3-1.2: It is the policy of the City of El Segundo that it continues to require developer TSM plans to encourage trip reduction programs and development of transit and ridesharing facilities over highway capacity expansion in order to achieve and maintain mobility and air quality.

Policy AQ3-1.3: It is the policy of the City of El Segundo to cooperate with efforts to expand bus, rail, and other forms of transit within the Los Angeles region.

Goal AQ4: Reduce Motorized Transportation

Objective AQ4-1: Promote non-motorized transportation.

Policy AQ4-1.1: It is the policy of the City of El Segundo that the City actively encourage the development and maintenance of a high-quality network of pedestrian and bicycle routes, linked to key locations, in order to promote non-motorized transportation.

Goal AQ5: Vehicle Work and Non-Work Trip Reduction

Objective AQ5-1: Improve transit systems serving the City and implement parking control methods to reduce work and non-work trips.

Policy AQ5-1.1: It is the policy of the City of El Segundo that the City discourage the use of single-occupant vehicles in congested areas of the City by changing or modifying the availability and cost of parking.

Policy AQ5-1.2: It is the policy of the City of El Segundo that the City actively encourage the enhancement of transit performance and availability and establish developer fees to offset the costs of transit improvements required as a result of new developments.

Goal AQ7: Reduce Vehicle Emissions Through Traffic Flow Improvements

- Objective AQ7-1:** Set annual objectives for the continued improvement of interconnected traffic signal control systems or appropriate non-interconnected synchronization methods on all streets where traffic volume and delay time is significant.
- Policy AQ7-1.1:** It is the policy of the City of El Segundo that a high priority be given to improve the flow of traffic through synchronization of signalized intersections, as this is among the most cost-effective means of reducing congestion, conserving energy, and improving air quality.
- Goal AQ8:** **Reduction in Tailpipe Emissions from Local Government Vehicle Fleets**
- Objective AQ8-1:** Support legislation which would improve vehicle/transportation technology and the conversion of vehicles by fleet operators to the use of “clean fuel.”
- Policy AQ8-1.1:** It is the policy of the City of El Segundo that the City support legislation for the use and ownership of clean fuel vehicles.
- Policy AQ8-1.2:** It is the policy of the City of El Segundo that the City support legislation for research, development, and demonstration of clean fuel vehicles in both fleet service and passenger use.
- Policy AQ8-1.3:** It is the policy of the City of El Segundo that the City invest in clean fuel systems on new City fleet vehicles.
- Goal AQ9:** **Reduction in Length of Vehicle Trips**
- Objective AQ9-1:** Improve the City’s jobs/housing relationship to achieve a reduction in the average length of commute-trips by the year 2010, as designated by SCAG.
- Policy AQ9-1.1:** It is the policy of the City of El Segundo that the City promote a better balance of jobs and housing within the City by considering housing proposals within areas of the City designated for Smoky Hollow Mixed-Use.
- Policy AQ9-1.2:** It is the policy of the City of El Segundo that the City participate in sub regional efforts with other cities or agencies to develop mutually beneficial approaches to improving the balance of jobs and housing.
- Policy AQ9-1.3:** It is the policy of the City of El Segundo that the City actively encourage the establishment of a shuttle bus system to transport employees and El Segundo residents between the east and west sides of the City.
- Goal AQ11:** **Reduce Emissions Associated with Government Energy Consumption**
- Objective AQ11-1:** Reduce energy use by City government facilities with an emphasis on peak demand reduction as stated by SCAG.

- Policy AQ11-1.1:** It is the policy of the City of El Segundo that a study be prepared to initiate implementation of a program for retrofitting City buildings with a full range of energy conservation measures.
- Goal AQ12:** **Reduction in Residential, Commercial, and Industrial Energy Consumption**
- Objective AQ12-1:** Enact the recommendations of the AQMP Energy Working Group for commercial and residential buildings and adopt ordinances to mitigate air quality impacts from water and pool heating systems.
- Policy AQ12-1.1:** It is the policy of the City of El Segundo that an ordinance be adopted requiring all new swimming pool water heater systems to utilize solar, electric, or low NOX gas-fired water heaters, and/or pool covers.
- Policy AQ12-1.2:** It is the policy of the City of El Segundo that the City encourage the incorporation of energy conservation features in the design of new projects and the installation of conservation devices in existing developments.
- Policy AQ12-1.3:** It is the policy of the City of El Segundo to provide incentives and/or regulations to reduce emissions from residential and commercial water heating.
- Policy AQ12-1.4:** It is the policy of the City of El Segundo that new construction not preclude the use of solar energy systems by uses and buildings on adjacent properties and consider enactment of a comprehensive solar access ordinance.
- Goal AQ13:** **Increase Recycling of Solid Waste and Use of Recycled Materials by Glass and Paper Manufacturers**
- Objective AQ13-1:** Reduce the amount of solid waste by 25 percent by 1994, and 50 percent by 2000.
- Policy AQ13-1.1:** It is the policy of the City of El Segundo that the City continue to implement the programs proposed in the City's Solid Waste Management Plan, concurrent with California Assembly Bill 939, to achieve a 25 percent reduction in residential solid waste requiring disposal by 1995, and a 50 percent reduction by the year 2000.
- Goal C2:** **Provisions for Alternative Modes of Transportation**
- Objective C2-1:** Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.
- Policy C2-1.1:** Encourage the development of pedestrian linkages to and from the Metro Green Line [C Line] stations to encourage and attract intermodal transit/walking trips.

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- Policy C2-1.2:** Develop a citywide system of pedestrian walkways, alleviating the conflict between pedestrians, autos, and bicyclists throughout the City.
- Policy C2-1.3:** Encourage new developments in the City to participate in the development of the citywide system of pedestrian walkways and require participation funded by the project developer where appropriate.
- Policy C2-1.4:** Ensure the installation of sidewalks on all future arterial widening or new construction projects, to establish a continuous and convenient link for pedestrians.
- Policy C2-1.6:** Encourage shopping areas to design their facilities for ease of pedestrian access.
- Policy C2-1.7:** Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.
- Objective C2-2:** Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.
- Policy C2-2.2:** Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.
- Policy C2-2.3:** Develop off-street bicycle paths in corridors where appropriate throughout the City.
- Policy C2-2.4:** Encourage the use of bicycles for trips to and from elementary, middle, and high schools in the area as well as parks, libraries, and other public facilities.
- Policy C2-2.5:** Continue coordination of bicycle route planning and implementation with adjacent jurisdictions and regional agencies.
- Policy C2-2.6:** Encourage design of new streets with the potential for Class I or Class II bicycle routes that separate the automobile, bicycle, and pedestrian to the maximum extent feasible.
- Policy C2-2.8:** Evaluate bikeway system links with the Metro Green Line [C Line] rail stations and improve access wherever feasible.
- Objective C2-3:** Ensure the provision of a safe and efficient transit system that will offer the residents, workers, and visitors of El Segundo a viable alternative to the automobile.
- Policy C2-3.1:** Work closely with the Los Angeles County Metropolitan Transportation Authority (MTA), Torrance Municipal Bus Lines, the El Segundo Employers Association (ESEA), and private businesses to expand and improve the public transit service within and adjacent to the City.

- Policy C2-3.2:** Ensure that transit planning is considered and integrated into all related elements of City planning.
- Objective C2-4:** Ensure the use of Transportation System Management (TSM) measures throughout the City, to ensure that the City’s circulation system is as efficient and cost effective as possible.
- Policy C2-4.2:** Continue to increase operational efficiencies of the transportation system by implementing all appropriate TSM measures, including but not limited to improving design standards, upgrading and coordination of traffic control devices, controlling on-street parking, and using sophisticated electronic control methods to supervise the flow of traffic.
- Objective C2-5:** Ensure the use of Transportation Demand Management (TDM) measures throughout the City, where appropriate, to discourage the single-occupant vehicle, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.
- Policy C2-5.1:** Ensure that TDM measures are considered during the evaluation of new developments within the City, including but not limited to ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.
- Policy C2-5.3:** Encourage the provision of preferential parking for high occupancy vehicles wherever possible.
- Policy C3-1.4:** Encourage development projects that effectively integrate major transportation facilities with land use planning and the surrounding environment. These joint uses will obtain economic and aesthetic benefits of coordinated design, achieve land conservation in space-short urban areas of El Segundo, and maintain neighborhood continuity in built-up areas affected by future major transportation routes.
- Policy C3-1.5:** Ensure that transit planning is considered and integrated into all related elements of City Planning.
- Policy C3-1.8:** Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.

3.3.4.3 City of El Segundo Municipal Code

The City of El Segundo Municipal Code contains various provisions addressing water conservation, transportation demand management, and EV charging that would have an indirect effect on GHG reduction. For example, Chapter 13-21 provides a streamlined permitting process for EV charging stations throughout the City. Chapter 15-16 establishes requirements for major new developments to provide facilities that encourage and accommodate the use of ridesharing, transit, pedestrian, and bicycle commuting as alternatives to single occupant motor vehicle trips.

3.4 Existing Conditions

3.4.1 Existing Statewide GHG Emissions

CARB reports that in 2019, emissions from GHG emissions statewide were 404 MMTCO₂e, 27 MMTCO₂e below the state's 2020 GHG limit of 431 MMTCO₂e. The transportation sector was the largest source of GHG emissions, accounting for approximately half of the state's GHG inventory when including upstream transportation emissions from the refinery and oil and gas industrial sectors. The commercial and residential sectors accounted for approximately 10 percent of GHG emissions. Agriculture accounted for approximately 8 percent, and electricity generation accounted for approximately 20 percent. Remaining emissions came from sectors such as non-transportation fuel-related industrial sources, recycling and waste management, and from high global warming potential gases.

In 2021, approximately 52 percent of electricity generation serving California came from renewable and zero-carbon resources (e.g., solar and wind).

4. Project Impacts

4.1 Thresholds of Significance

4.1.1 State CEQA Guidelines Appendix G

In Accordance with Appendix G of the State CEQA Guidelines, the Project would have a significant impact related to GHGs if it would:

- a) ***Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?***
- b) ***Conflict with any applicable plan, policy, or regulation of an agency adopted for the purpose of reducing the emissions of GHGs?***

4.2 Methodology

4.2.1 Consistency Analysis

To evaluate the Project's GHG emissions impacts pursuant to the two Appendix G checklist questions, the City uses a qualitative analysis that assesses the Project's consistency with the following plans, policies, and regulations adopted to reduce GHG emissions:

- SCAG's 2020-2045 RTP/SCS
- EO B-55-18, AB 1279, and the 2022 Scoping Plan
- City of El Segundo Climate Action Plan

Additionally, to comply with the requirements of CEQA Guidelines, Section 15064.4(a), the analysis includes a good faith estimate of GHG emissions that may result from the Project.

Neither the City nor the SCAQMD has adopted GHG significance thresholds for plan-level projects. SCAQMD has adopted significance thresholds for industrial-type projects for which it is the lead agency, but the SCAQMD industrial thresholds are not relevant to the Project. Moreover, the SCAQMD is not the lead agency for the Project, and the City has not adopted the SCAQMD's thresholds for assessment of this Project's GHG impacts.

In the absence of any applicable adopted numeric threshold, the significance of the Project's GHG emissions is evaluated consistent with CEQA Guidelines Section 15064.4(b) by considering whether the Project would conflict with applicable regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions. For this Project, as a land use planning project, the most directly applicable adopted regulatory plan to reduce GHG emissions is the 2020-2045 RTP/SCS, which is designed to achieve regional GHG reductions from the land use and transportation sectors as required by SB 375 and the State's long-term climate goals. This analysis also considers qualitative consistency with the 2022 Scoping Plan Update and the City's Climate Action Plan. With respect to EO B-55-18 and AB 1279, CARB's 2022 Scoping Plan provides strategies and programs aimed at achieving their GHG emissions reduction goals, which is a target of 85 percent below 1990 levels by 2045. In other words, consistency with the 2022 Scoping Plan demonstrates a project's consistency with the EO B-55-18 and AB 1279 GHG emissions reduction goals. The City's Climate Action Plan, while not a qualified CAP under CEQA, also outlines strategies that would aid in the achievement of the State's GHG reduction goals.

4.2.2 Quantification of Project GHG Emissions

By amending the land use designation and zoning on eight parcels within the Specific Plan area, the Downtown Specific Plan Update would facilitate construction of projects within the Specific Plan area through 2040. GHG emissions associated with the construction and operations of these future projects were estimated using the California Emissions Estimator Model version 2022 (CalEEMod). Construction of projects facilitated by the Downtown Specific Plan Update would generate GHG emissions due to the use of diesel-powered equipment and construction vehicles throughout the implementation period through 2040. Construction electricity consumption would also result in GHG emissions. The exact location and types of future development are not known, but the general location and types of development can be reasonably anticipated. For example, projects would likely be concentrated along Main Street and would consist mainly of low-rise or mid-rise buildings, in accordance with existing and proposed site-development standards for the Project's districts. Construction would involve phases such as demolition, grading, building construction, paving, and architectural coatings activities. The magnitude of construction-related GHG emissions would be dependent on project-specific factors that are not known at this time (e.g., the types and quantify of equipment utilized by projects, the number of construction vehicle trips generated by projects, etc.), but given the allowable uses and typical construction activities, it is nevertheless possible to estimate the Project's construction-related GHG emissions with CalEEMod, which draws on extensive construction survey data of construction equipment, construction equipment emissions, construction phase lengths, and other factors to estimate emissions. The analysis estimates GHG emissions that would be associated with full buildout of the Project's additional 130,000 square feet of retail and restaurant uses, 200,000 square feet of

office space, 24,000 square feet of medical office space, and 300 residential units. Construction assumptions are provided in the appendix to this report. Operations-related assumptions are also provided in the appendix. The analysis addresses GHG emissions from the following operational sources that would be associated with the aforementioned land uses:

- Area Sources: Emissions associated with the on-site use of powered equipment.
- Energy Sources: Emissions associated with electricity and natural gas use for space heating and cooling, water heating, energy consumption, and lighting.
- Mobile Sources: Emissions associated with a land use's related vehicle travel.
- Water/Wastewater Sources: Emissions associated with energy used to pump, convey, delivery, and treat water.
- Solid Waste Sources: Emissions associated with the disposal of solid waste into landfills.
- Refrigerant Sources: Emissions associated with fugitive GHG emissions related to building air conditioning and refrigeration equipment.

A fundamental difficulty in the analysis of GHG emissions is the global nature of existing and cumulative future conditions. Changes in GHG emissions can be difficult to attribute to a particular planning program or project because the planning effort or project may cause a shift in the locale for some type of GHG emissions, rather than causing "new" GHG emissions. As a result, there is frequently an inability to conclude whether a project's GHG emissions represent a net global increase, reduction, or no change in GHGs that would exist if the project were not implemented. For example, if a multi-family residential project replaces an existing supermarket, GHG emissions associated with the existing supermarket would not be totally eliminated because former patrons of the supermarket would still drive and get groceries somewhere else, which would continue to generate associated GHG emissions. GHG emissions associated with the new multi-family residential project would not be totally new, because many residents will have presumably moved there from other housing. Their GHG emissions would be shifted from their old housing to their new housing, but if the new multi-family residential project has access to high quality transit and walkable destinations, then there is a strong likelihood that the residents' GHG per capita would be reduced on average by their move to the new project. Notwithstanding these complexities, the analysis of the Project's GHG emissions is conservative because it assumes all the Project's direct and indirect GHG emissions would be new additions to the atmosphere.

5. Analysis of Project Impacts

5.1 Threshold a):

Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Threshold b):

Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG?

As described above, consistency with applicable GHG emissions reduction plans would result in a less than significant impact. The following section describes the extent to which the Project is consistent with the 2020-2045 RTP/SCS, the 2022 Scoping Plan Update, and the City's Climate Action Plan. As demonstrated below, the Project would be consistent with these plans, and its GHG impact would therefore be **less than significant**.

5.1.1 2020-2045 RTP/SCS

As noted earlier, SCAG's latest 2020-2045 RTP/SCS (Connect SoCal) is expected to help the SCAG region, and in turn California, reach its latest GHG reduction goals. Implementation of the 2020-2045 RTP/SCS is projected to reduce per capita vehicle GHG emissions by 19 percent by 2035, thus enabling the region to fulfill its portion of SB 375 compliance. Implementation is also projected to reduce daily VMT per capita by 5 percent by 2045.

Generally, projects are considered consistent with the provisions of regional land use plans and regulations if they are compatible with the general intent of the plans and would not preclude the attainment of their primary goals. The land use pattern emphasized by the 2020-2045 RTP/SCS involves concentrating new, dense housing and/or job growth in infill locations and PGAs in an effort to facilitate alternative transportation modes and reduce vehicle trips and VMT. As explained earlier, PGAs such as Job Centers, Transit Priority Areas (TPAs), High Quality Transit Areas (HQTAs), Neighborhood Mobility Areas (NMAs), Livable Corridors, and Spheres of Influence (SOIs) account for only four percent of the SCAG region's total land area, but the 2020-2045 RTP/SCS anticipates that 64 percent of new household growth and 74 percent of employment growth will occur in these PGAs. The 2020-2045 RTP/SCS supports this concentration of new growth within PGAs: according to the 2020-2045 RTP/SCS, dense infill development in PGAs can reduce travel distances, increase mobility options, increase workplace accessibility, leverage transit investments, and conserve the region's resource areas. Thus, the 2020-2045 RTP/SCS emphasizes new infill construction in PGAs and assumes a significant increase in development

in such locations, in some cases outpacing what is currently anticipated by local general plans. Projects fitting this land use pattern are consistent with the 2020-2045 RTP/SCS.

The Downtown Specific Plan Update aims to achieve or bolster this land use pattern within the Specific Plan area. First, the Specific Plan area is already designated a NMA. The 2020-2045 RTP/SCS targets growth in NMAs because of NMAs robust residential to non-residential land use connections and high roadway intersection densities. These features promote safer, multimodal, short trips and can reduce reliance on single occupancy vehicles, reducing VMT and corresponding GHG emissions. Public engagement data for this Specific Plan Update supports this: almost ninety percent of survey respondents listed walking as one of their typical travel modes for accessing the Downtown area. On this basis alone, development of the Project and its land uses within the Specific Plan area would be consistent with the 2020-2045 RTP/SCS's goals to emphasize dense infill development within PGAs. Second, the Project proposes a range of transportation and mobility improvements that would bolster the area's existing walkability and promote alternative transportation modes. For example, the Project proposes the following improvements:

- Pedestrian crossing enhancements at 12 locations
- Area-wide sidewalk curb ramp enhancements
- Bicycle mobility enhancements on two roadway segments
- Area-wide bicycle accommodation and wayfinding enhancements
- Bus stop enhancements at six existing bus stops
- Signal operation enhancements on two roadway segments
- Area-wide intersection control improvements (signage and striping)
- In-road bollard receptacles for temporary street closures at two locations
- Area-wide on-street parking striping enhancements
- Area-wide off-street parking optimization enhancements

By implementing these transportation and mobility improvements and by focusing dense new retail, commercial, and residential uses within a PGA, the Project fits the land use pattern adopted and emphasized by the 2020-2045 RTP/SCS and would not interfere with its VMT reduction goals or its corresponding GHG reduction target.

5.1.2 2022 Scoping Plan Update

As explained earlier, the 2022 Scoping Plan addresses the recent signing of AB 1279, which codified EO-B-55-18's target for California to achieve and maintain carbon net neutrality by 2045 (equivalent to a reduction in statewide anthropogenic GHG emissions of 85 percent below 1990 levels). The 2022 Scoping Plan establishes a scenario by which the State may achieve this goal by 2045 or earlier.

Implementation of the Downtown Specific Plan Update would allow for an additional 130,000 square feet of retail and restaurant land uses, 200,000 square feet of office space, 24,000 square feet of medical office space, and 300 residential units to be developed within the Specific Plan area. However, as explained, the Downtown Specific Plan Update does not propose any actual land use development project. Therefore, the 2022 Scoping Plan's project-specific attributes and considerations have limited applicability to the Project. Nevertheless, the Project is clearly consistent with the 2022 Scoping Plan's GHG reduction strategies for plan-level projects. The 2022 Scoping Plan emphasizes, "the State has long been clear that urban infill projects, particularly in high-resource and low-VMT areas, would be generally supportive of the State's climate and regional air quality goals." It explains:

"In many cases, land use strategies that support more compact development in infill areas, particularly those already displaying efficient resident travel patterns, have the greatest potential to reduce emissions while also reducing combined housing and transportation costs for Californians and infrastructure costs for local governments due to avoided new roads, public schools, and other sprawl supporting infrastructure. Infill housing development alleviates pressure to develop on the urban periphery, preserving natural and working lands and areas often at risk of wildfire."

The 2022 Scoping Plan describes such infill areas as "climate-smart locations":

"Climate-smart locations include neighborhoods, commercial corridors, town centers, downtowns, and other areas where residents have access to a broad range of mobility options in addition to private automobiles (such as transit, walking, and biking), as well as where residents have access to housing, jobs, and other key destinations. Such communities make it possible for residents to live, work, and recreate without dependence on a personal car. For trips where driving is required, car trips can be relatively short and public infrastructure should support the use of zero-emission vehicles.

The Downtown Specific Plan Update is consistent with these land use strategies to support compact development in a "climate-smart" infill location. The Specific Plan Area is designated a NMA by SCAG's 2020-2045 RTP/SCS, and it is a downtown/town center-type neighborhood with high walkability and accessibility to a range of destinations. The Downtown Specific Plan Update would encourage compact urban infill projects in this neighborhood that are designed to leverage – and add to – the area's walkability and pedestrian environment.

Additionally, the Downtown Specific Plan Update also proposes a range of transportation and mobility improvements that would further enhance the area's existing walkability and promote alternative transportation modes. As listed earlier, the Project proposes the following improvements:

- Pedestrian crossing enhancements at 12 locations
- Area-wide sidewalk curb ramp enhancements

- Bicycle mobility enhancements on two roadway segments
- Area-wide bicycle accommodation and wayfinding enhancements
- Bus stop enhancements at six existing bus stops
- Signal operation enhancements on two roadway segments
- Area-wide intersection control improvements (signage and striping)
- In-road bollard receptacles for temporary street closures at two locations
- Area-wide on-street parking striping enhancements
- Area-wide off-street parking optimization enhancements

These improvements would further contribute to the “climate-smart” attributes of the Specific Plan area. Overall, projects such as the Downtown Specific Plan Update are part of the solution for achieving the land use and transportation-related GHG reductions necessary to achieve the State’s climate goals. Given these considerations, the Project would not conflict with or obstruct implementation of the 2022 Scoping Plan and its goal to achieve the State’s GHG reduction targets under EO B-55-18 and AB 1279.

5.1.3 City of El Segundo Climate Action Plan

As explained earlier, the City’s CAP is not CEQA-qualified under the requirements of CEQA Guidelines Section 15183.5 but nevertheless identifies how the City may reduce its GHG emissions in line with the State’s AB 32 targets. The CAP determines that implementation of five source strategies – Land Use and Transportation, Energy Efficiency, Solid Waste, Urban Greening, and Energy Generation and Storage – would reduce the City’s GHG emissions to 49 percent below 2005 levels by 2035 and put the City “on a path” towards reducing emissions 80 percent below 1990 levels by 2050. The CAP includes a long list of goals, measures, and sub-strategies under each of the five source strategies, many of which would not apply to the Project, which does not propose any actual land use development project. **Table 1** assesses the Project’s consistency with relevant measures.

Table 1
Consistency Analysis:
City of El Segundo Climate Action Plan

Measure	Project Consistency
Source Strategy: Land Use and Transportation (LUT)	
LUT A5: Multi-Modal Streets Complete Streets	Consistent. This strategy involves encouraging multi-modal streets that accommodate Neighborhood Electric Vehicles that travel at speeds of 25 miles per hour or less by accommodating them on high-speed streets or integrating them with other slow-speed

Table 1
Consistency Analysis:
City of El Segundo Climate Action Plan

Measure	Project Consistency
	infrastructure such as protected bike lanes. The Project would implement complete streets strategies within the Specific Plan area that promote traffic calming and integration with pedestrian and bicycle facilities.
LUT B1: Facilitate Private and Public Mobility Services (Ride-Hailing, Ride-Sharing, Car-Sharing, Bike-Sharing)	Consistent. The Project's bicycle mobility enhancements could help leverage future bike-sharing programs within the City.
LUT C1: Provide a Bus Rapid Transit (BRT) System	Consistent. By allowing increases in land use densities within the Specific Plan area, the Project would promote transit supportive densities capable of supporting future BRT service. The Project's pedestrian mobility and bus stop enhancements could also help leverage future BRT service to the Specific Plan area.
LUT C2: Expand Transit Network	Consistent. Similarly, by allowing increases in land use densities within the Specific Plan area, the Project would promote transit supportive densities that could support future transit expansion and other transit investment within the Specific Plan area.
LUT D1: Provide Traffic Calming Measures	Consistent. The streetscape design and elements implemented by the Project (e.g., bollards, wider sidewalks, etc.) would promote traffic calming and encourage walking, biking, and outdoor dining.
LUT D2: Provide Pedestrian/Bicycle Networks Improvements	Consistent. The Project would include numerous pedestrian and bicycle mobility improvements that are listed previously in this report. A central goal of the Project is to promote walking and biking within the Specific Plan area.
LUT D3: Improve Design of Development	Consistent. A central goal of the Project is to implement development standards that enhance walking and biking within the Specific Plan area (e.g., building placement, maximum heights,

Table 1
Consistency Analysis:
City of El Segundo Climate Action Plan

Measure	Project Consistency
	setbacks, relationship to streets and sidewalks, etc.).
LUT E1: Limit Parking Supply	Consistent. The Project promotes strategies such as shared parking agreements between businesses to maximize parking efficiency.
LUT G1: Increase Density	Consistent. The Project would encourage higher density by allowing additional retail, restaurant, office, medical office, and residential uses in the Specific Plan area.
LUT G2: Increase Diversity	Consistent. The Project would encourage a mix of compatible retail, commercial, and residential uses within the Specific Plan area.
LUT G3: Increase Destination Accessibility	Consistent. The Project involves a downtown neighborhood with a high density of retail and commercial destinations. The Project's mobility enhancements would increase accessibility to destinations within and surrounding the Specific Plan area.
LUT G4: Increase Transit Accessibility	Consistent. The Project includes pedestrian and bicycle mobility enhancements, as well as bus stop improvements, that would increase transit accessibility.
Source Strategy: Energy Efficiency (EE)	
EE F1: Promote Tree Planting for Shading and Energy Efficiency	Consistent. The Project's design standards would promote street trees, shade trees, and landscaping.
EE I2: Upgrade or Incorporate Water-Conserving Landscape	Consistent. The Project would utilize drought-tolerant and California native plants to reduce irrigation and conserve water.
EE I3: Plant Trees for Shade and Carbon Sequestration	Consistent. The Project's design standards would promote street trees, shade trees, and

Table 1
Consistency Analysis:
City of El Segundo Climate Action Plan

Measure	Project Consistency
	landscaping that can reduce surface temperatures and sequester CO ₂ .
<i>Source: City of El Segundo, Climate Action Plan, December 2017.</i>	

5.1.4 Consistency Analysis - Conclusion

In summary, the Project would be consistent with 2020-2045 RTP/SCS, 2022 Scoping Plan Update, and City of El Segundo Climate Action Plan efforts and strategies to reduce GHG emissions in accordance with the latest and most stringent AB 1279 and SB 375 targets. As a result, the Project's impacts related to GHG emissions and climate change would be **less than significant**.

5.2 Project Emissions

5.2.1 Construction

As explained earlier, construction of projects facilitated by the Downtown Specific Plan Update could occur through 2040. As part of the Project's air quality analysis, construction emissions associated with 10 percent of buildout allowed under the Project (i.e., 20,000 square feet of the allowable 200,000 square feet increase in office uses, etc.) were estimated using CalEEMod. **Table 2** shows the results of this 10 percent buildout scenario and multiplies the GHG emissions by 10 to estimate construction emissions that would be associated with full buildout of the Project's allowable land use increases. As shown, construction of 100 percent buildout of the Project's allowable land use increases is estimated to generate approximately 34,400 MTCO_{2e}. As recommended by the SCAQMD, the total construction-related GHG emissions were amortized over a 30-year project lifetime (i.e., divided by 30). This results in annual Project construction emissions of approximately 1,147 MTCO_{2e}.

Table 2
Construction-Related GHG Emissions

Scenario	Emissions (MTCO _{2e})
10 percent buildout	344
100 percent buildout	34,400
Amortized over 30 years	1,147
<i>Source: NTEC, 2023.</i>	

5.2.2 Operations

Table 3 shows the Project's estimated GHG emissions from operations associated with 100 percent buildout of the Project's allowable land use increases, including the Project's annualized

construction-related GHG emissions that are shown above in **Table 2**. GHG emissions were calculated based on the Project's 2040 horizon year. Operation of the Project in 2040 estimated to result in approximately 12,773.06 MTCO₂e. However, this is likely a very conservative estimate. For example, CalEEMod contains limited data regarding forecasted carbon emissions factors for electric utilities such as Southern California Edison, which would provide electricity to uses in the Specific Plan area. SB 100 requires that 100 percent of electricity provided to retail users in California come from carbon-free sources by 2045, meaning that by 2040, it reasons that electricity provided by Southern California Edison would be nearly carbon free. However, for Southern California Edison, CalEEMod utilizes the same 260.79 lbs/MWh emissions factor for the years 2040 and 2045, demonstrating that CalEEMod does not yet account for this utility's transition to 100 percent renewable energy under SB 100. By 2040, electricity provided to uses within the Specific Plan area would likely be nearly carbon free, and the energy-related emissions shown in **Table 3** would be lower than the 1,280 MTCO₂e figure shown. CalEEMod also does not fully account for the declines in area and energy-related GHG emissions that would occur as the State transitions away from natural gas appliances, or the declines in mobile emissions that would result from EO N-79-200, which establishes that 100 percent of in-state sales of new passenger cars and trucks be zero-emission by 2035. Thus, the annual GHG emissions shown in **Table 3** should be interpreted as conservative estimates – actual emissions are likely to be substantially lower.

Table 3
Operations-Related GHG Emissions (Full Buildout 2040)

Source	Emissions (MTCO ₂ e)
Mobile	9,953
Area	12.4
Energy	1,280
Water/Wastewater	129
Solid Waste	251
Refrigerants	0.66
Construction	1,147
Total Emissions	12,773.06
<i>Source: NTEC, 2023.</i>	

Air Quality and Greenhouse Gases Appendix

El Segundo Downtown Specific Plan Update Project

Downtown SP Update - Construction Only (Summer) Detailed Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Construction Only (Summer)
Construction Start Date	7/1/2024
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92134258270639, -118.41595830576219
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	13.0	1000sqft	0.30	13,000	0.00	—	—	—

General Office Building	20.0	1000sqft	0.46	20,000	0.00	—	—	—
Medical Office Building	2.40	1000sqft	0.06	2,400	0.00	—	—	—
Apartments Mid Rise	30.0	Dwelling Unit	0.79	28,800	0.00	—	89.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.74	27.6	52.6	56.9	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,692	13,692	0.60	0.86	15.4	13,977
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	1.29	9.98	12.4	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,533	2,533	0.10	0.07	0.07	2,556
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.86	2.10	6.13	6.99	0.01	0.24	0.51	0.75	0.22	0.14	0.36	—	1,573	1,573	0.07	0.07	0.74	1,598
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.16	0.38	1.12	1.28	< 0.005	0.04	0.09	0.14	0.04	0.03	0.07	—	260	260	0.01	0.01	0.12	265

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.74	27.6	52.6	56.9	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,692	13,692	0.60	0.86	15.4	13,977
2025	1.46	1.22	9.41	12.5	0.02	0.33	0.51	0.84	0.30	0.12	0.43	—	2,542	2,542	0.10	0.07	2.45	2,568
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.55	1.29	9.98	12.4	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,533	2,533	0.10	0.07	0.07	2,556
2025	1.46	1.21	9.44	12.1	0.02	0.33	0.51	0.84	0.30	0.12	0.43	—	2,519	2,519	0.10	0.07	0.06	2,543
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.86	2.10	6.13	6.99	0.01	0.24	0.51	0.75	0.22	0.14	0.36	—	1,573	1,573	0.07	0.07	0.74	1,598
2025	0.27	0.22	1.74	2.25	< 0.005	0.06	0.09	0.15	0.06	0.02	0.08	—	464	464	0.02	0.01	0.19	469
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.16	0.38	1.12	1.28	< 0.005	0.04	0.09	0.14	0.04	0.03	0.07	—	260	260	0.01	0.01	0.12	265
2025	0.05	0.04	0.32	0.41	< 0.005	0.01	0.02	0.03	0.01	< 0.005	0.01	—	76.9	76.9	< 0.005	< 0.005	0.03	77.7

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Off-Road Equipment	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502
Demolition	—	—	—	—	—	—	1.83	1.83	—	0.28	0.28	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	0.98	1.01	< 0.005	0.04	—	0.04	0.04	—	0.04	—	157	157	0.01	< 0.005	—	158
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.94	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.70	179
Vendor	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	0.00
Hauling	0.30	0.08	5.21	1.84	0.03	0.06	1.19	1.25	0.06	0.33	0.38	—	4,475	4,475	0.22	0.72	10.4	4,705

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	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	0.00
Hauling	0.02	< 0.005	0.35	0.11	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	282	282	0.01	0.05	0.28	296
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	49.0

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.00	0.97	< 0.005	0.05	—	0.05	0.04	—	0.04	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05	0.04	0.05	0.75	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	141	141	0.01	< 0.005	0.56	143
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.56	8.56	< 0.005	< 0.005	0.02	8.68
Vendor	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	0.00

Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44
Vendor	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	0.00
Hauling	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	0.00

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.49	0.41	3.40	3.64	0.01	0.13	—	0.13	0.12	—	0.12	—	649	649	0.03	0.01	—	651
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	0.09	0.07	0.62	0.66	< 0.005	0.02	—	0.02	0.02	—	0.02	—	107	107	< 0.005	< 0.005	—	108
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.16	2.48	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	465	465	0.02	0.02	1.83	472
Vendor	0.02	0.01	0.34	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.79	304
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.19	2.10	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	441	441	0.02	0.02	0.05	446
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.02	303
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.05	0.07	0.80	0.00	0.00	0.15	0.15	0.00	0.04	0.04	—	161	161	0.01	0.01	0.28	163
Vendor	0.01	< 0.005	0.13	0.06	< 0.005	< 0.005	0.03	0.03	< 0.005	0.01	0.01	—	105	105	< 0.005	0.01	0.12	109
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	0.01	0.01	0.15	0.00	0.00	0.03	0.03	0.00	0.01	0.01	—	26.7	26.7	< 0.005	< 0.005	0.05	27.0
Vendor	< 0.005	< 0.005	0.02	0.01	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	17.3	17.3	< 0.005	< 0.005	0.02	18.1
Hauling	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	0.00

3.7. Building Construction (2025) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
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Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.28	1.07	8.95	10.0	0.02	0.33	—	0.33	0.30	—	0.30	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.24	0.20	1.65	1.85	< 0.005	0.06	—	0.06	0.06	—	0.06	—	331	331	0.01	< 0.005	—	332
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04	0.04	0.30	0.34	< 0.005	0.01	—	0.01	0.01	—	0.01	—	54.9	54.9	< 0.005	< 0.005	—	55.0
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.14	2.29	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	455	455	0.02	0.02	1.67	462
Vendor	0.02	0.01	0.32	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	286	286	0.01	0.04	0.78	299
Hauling	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	0.00

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.14	0.16	1.94	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	432	432	0.02	0.02	0.04	437
Vendor	0.02	0.01	0.34	0.16	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.02	—	286	286	0.01	0.04	0.02	298
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.38	0.00	0.00	0.08	0.08	0.00	0.02	0.02	—	80.6	80.6	< 0.005	< 0.005	0.13	81.6
Vendor	< 0.005	< 0.005	0.06	0.03	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	52.6	52.6	< 0.005	0.01	0.06	54.9
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.01	< 0.005	0.01	0.07	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	13.3	13.3	< 0.005	< 0.005	0.02	13.5
Vendor	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	—	8.71	8.71	< 0.005	< 0.005	0.01	9.09
Hauling	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	0.00

3.9. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.63	0.53	4.90	6.53	0.01	0.23	—	0.23	0.21	—	0.21	—	992	992	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.50	4.50	< 0.005	< 0.005	—	4.51
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.06	0.94	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	176	176	0.01	0.01	0.70	179
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	0.01	4.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.78
Vendor	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	0.00
Hauling	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	0.00

3.11. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	22.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Architect ural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.39	1.39	< 0.005	< 0.005	—	1.40
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.03	0.50	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	93.0	93.0	< 0.005	< 0.005	0.37	94.4
Vendor	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	0.00
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	7/1/2024	7/31/2024	5.00	23.0	—
Grading	Grading	7/1/2024	7/31/2024	5.00	23.0	—
Building Construction	Building Construction	7/1/2024	4/4/2025	5.00	200	—
Paving	Paving	7/1/2024	7/12/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	7/1/2024	7/31/2024	5.00	23.0	—

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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41

Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	32.1	40.0	HHDT
Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2

Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	32.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	9.01	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.59	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	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%
Sweep paved roads once per month	9%	9%

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	58,320	19,440	53,100	17,700	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	64,200	—
Grading	—	—	23.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

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

Land Use	Area Paved (acres)	% Asphalt
Strip Mall	0.00	0%
General Office Building	0.00	0%
Medical Office Building	0.00	0%
Apartments Mid Rise	—	0%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005
2025	0.00	532	0.03	< 0.005

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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6

Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00
Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096

Employed	92.6344155
Median HI	71.46156807
Education	—
Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0

Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4

Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
Construction: Construction Phases	See Note A.1
Construction: Trips and VMT	See Note A.2

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Construction Only (Winter)
Construction Start Date	1/1/2024
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92134258270639, -118.41595830576219
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	13.0	1000sqft	0.30	13,000	0.00	—	—	—

General Office Building	20.0	1000sqft	0.46	20,000	0.00	—	—	—
Medical Office Building	2.40	1000sqft	0.06	2,400	0.00	—	—	—
Apartments Mid Rise	30.0	Dwelling Unit	0.79	28,800	0.00	—	89.0	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.55	1.29	9.94	12.8	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,557	2,557	0.10	0.07	2.62	2,583
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	6.73	27.6	52.9	56.0	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,638	13,638	0.60	0.86	0.40	13,909
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.15	2.34	8.00	9.33	0.02	0.31	0.61	0.92	0.28	0.17	0.45	—	2,050	2,050	0.09	0.09	0.95	2,079
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.21	0.43	1.46	1.70	< 0.005	0.06	0.11	0.17	0.05	0.03	0.08	—	339	339	0.01	0.01	0.16	344

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.55	1.29	9.94	12.8	0.02	0.37	0.51	0.88	0.35	0.12	0.47	—	2,557	2,557	0.10	0.07	2.62	2,583
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	6.73	27.6	52.9	56.0	0.11	2.11	5.92	8.03	1.95	1.74	3.69	—	13,638	13,638	0.60	0.86	0.40	13,909
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	1.15	2.34	8.00	9.33	0.02	0.31	0.61	0.92	0.28	0.17	0.45	—	2,050	2,050	0.09	0.09	0.95	2,079
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2024	0.21	0.43	1.46	1.70	< 0.005	0.06	0.11	0.17	0.05	0.03	0.08	—	339	339	0.01	0.01	0.16	344

3. Construction Emissions Details

3.1. Demolition (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.92	1.61	15.6	16.0	0.02	0.67	—	0.67	0.62	—	0.62	—	2,494	2,494	0.10	0.02	—	2,502

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Demolition	—	—	—	—	—	—	1.83	1.83	—	0.28	0.28	—	—	—	—	—	—	
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	0.12	0.10	0.98	1.01	< 0.005	0.04	—	0.04	0.04	—	0.04	—	157	157	0.01	< 0.005	—	158
Demolition	—	—	—	—	—	—	0.12	0.12	—	0.02	0.02	—	—	—	—	—	—	
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	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	26.0	26.0	< 0.005	< 0.005	—	26.1
Demolition	—	—	—	—	—	—	0.02	0.02	—	< 0.005	< 0.005	—	—	—	—	—	—	
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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.06	0.06	0.07	0.80	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	0.01	0.01	0.02	169
Vendor	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	
Hauling	0.30	0.08	5.41	1.82	0.03	0.06	1.19	1.25	0.06	0.33	0.38	—	4,476	4,476	0.22	0.72	0.27	4,696
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.05	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	10.7	10.7	< 0.005	< 0.005	0.02	10.8
Vendor	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	

Hauling	0.02	< 0.005	0.35	0.11	< 0.005	< 0.005	0.07	0.08	< 0.005	0.02	0.02	—	282	282	0.01	0.05	0.28	296
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.77	1.77	< 0.005	< 0.005	< 0.005	1.80
Vendor	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	0.00
Hauling	< 0.005	< 0.005	0.06	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	46.7	46.7	< 0.005	0.01	0.05	49.0

3.3. Grading (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.96	1.65	15.9	15.4	0.02	0.74	—	0.74	0.68	—	0.68	—	2,454	2,454	0.10	0.02	—	2,462
Dust From Material Movement	—	—	—	—	—	—	1.84	1.84	—	0.89	0.89	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12	0.10	1.00	0.97	< 0.005	0.05	—	0.05	0.04	—	0.04	—	155	155	0.01	< 0.005	—	155
Dust From Material Movement	—	—	—	—	—	—	0.12	0.12	—	0.06	0.06	—	—	—	—	—	—	—

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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	0.00	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.02	0.18	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	25.6	25.6	< 0.005	< 0.005	—	25.7	
Dust From Material Movement	—	—	—	—	—	—	0.02	0.02	—	0.01	0.01	—	—	—	—	—	—	—	
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	0.00	
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	0.05	0.04	0.06	0.64	0.00	0.00	0.13	0.13	0.00	0.03	0.03	—	134	134	0.01	< 0.005	0.01	135	
Vendor	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	0.00	
Hauling	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	0.00	
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.04	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	8.56	8.56	< 0.005	< 0.005	0.02	8.68	
Vendor	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	0.00	
Hauling	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	0.00	
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	1.42	1.42	< 0.005	< 0.005	< 0.005	1.44	
Vendor	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	0.00	
Hauling	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	0.00	

3.5. Building Construction (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.36	1.13	9.44	10.1	0.02	0.37	—	0.37	0.34	—	0.34	—	1,801	1,801	0.07	0.01	—	1,807
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.75	0.62	5.17	5.54	0.01	0.20	—	0.20	0.19	—	0.19	—	987	987	0.04	0.01	—	990
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14	0.11	0.94	1.01	< 0.005	0.04	—	0.04	0.03	—	0.03	—	163	163	0.01	< 0.005	—	164
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.16	2.48	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	465	465	0.02	0.02	1.83	472
Vendor	0.02	0.01	0.34	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.79	304
Hauling	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	0.00
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.16	0.15	0.19	2.10	0.00	0.00	0.43	0.43	0.00	0.10	0.10	—	441	441	0.02	0.02	0.05	446
Vendor	0.02	0.01	0.36	0.17	< 0.005	< 0.005	0.08	0.08	< 0.005	0.02	0.03	—	291	291	0.01	0.04	0.02	303
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.09	0.08	0.10	1.21	0.00	0.00	0.23	0.23	0.00	0.05	0.05	—	245	245	0.01	0.01	0.43	248
Vendor	0.01	< 0.005	0.20	0.09	< 0.005	< 0.005	0.04	0.04	< 0.005	0.01	0.01	—	159	159	0.01	0.02	0.19	166
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.02	0.01	0.02	0.22	0.00	0.00	0.04	0.04	0.00	0.01	0.01	—	40.6	40.6	< 0.005	< 0.005	0.07	41.1
Vendor	< 0.005	< 0.005	0.04	0.02	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	< 0.005	—	26.4	26.4	< 0.005	< 0.005	0.03	27.5
Hauling	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	0.00

3.7. Paving (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Onsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.63	0.53	4.90	6.53	0.01	0.23	—	0.23	0.21	—	0.21	—	992	992	0.04	0.01	—	995
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.02	0.01	0.13	0.18	< 0.005	0.01	—	0.01	0.01	—	0.01	—	27.2	27.2	< 0.005	< 0.005	—	27.3
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.02	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	4.50	4.50	< 0.005	< 0.005	—	4.51
Paving	—	0.00	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06	0.06	0.07	0.80	0.00	0.00	0.16	0.16	0.00	0.04	0.04	—	167	167	0.01	0.01	0.02	169
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	< 0.005	< 0.005	< 0.005	0.02	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	4.65	4.65	< 0.005	< 0.005	0.01	4.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	< 0.005	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.77	0.77	< 0.005	< 0.005	< 0.005	0.78
Vendor	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	0.00
Hauling	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	0.00

3.9. Architectural Coating (2024) - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	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	0.17	0.14	0.91	1.15	< 0.005	0.03	—	0.03	0.03	—	0.03	—	134	134	0.01	< 0.005	—	134
Architect ural Coatings	—	22.1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01	0.01	0.06	0.07	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	8.41	8.41	< 0.005	< 0.005	—	8.44
Architect ural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

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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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	< 0.005	< 0.005	0.01	0.01	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	1.39	1.39	< 0.005	< 0.005	—	1.40
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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	0.00
Offsite	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03	0.03	0.04	0.42	0.00	0.00	0.09	0.09	0.00	0.02	0.02	—	88.1	88.1	< 0.005	< 0.005	0.01	89.2
Vendor	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	0.00
Hauling	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	0.00
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.03	0.00	0.00	0.01	0.01	0.00	< 0.005	< 0.005	—	5.64	5.64	< 0.005	< 0.005	0.01	5.71
Vendor	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	0.00
Hauling	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	0.00
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	< 0.005	< 0.005	< 0.005	0.01	0.00	0.00	< 0.005	< 0.005	0.00	< 0.005	< 0.005	—	0.93	0.93	< 0.005	< 0.005	< 0.005	0.95
Vendor	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	0.00
Hauling	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	0.00

4. Operations Emissions Details

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	TOG	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	TOG	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	TOG	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	1/1/2024	1/31/2024	5.00	23.0	—
Grading	Grading	1/1/2024	1/31/2024	5.00	23.0	—
Building Construction	Building Construction	1/1/2024	10/4/2024	5.00	200	—
Paving	Paving	1/1/2024	1/12/2024	5.00	10.0	—
Architectural Coating	Architectural Coating	1/1/2024	1/31/2024	5.00	23.0	—

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	Tractors/Loaders/Backhoes	Diesel	Average	3.00	8.00	84.0	0.37
Demolition	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40

Demolition	Concrete/Industrial Saws	Diesel	Average	1.00	8.00	33.0	0.73
Grading	Graders	Diesel	Average	1.00	8.00	148	0.41
Grading	Tractors/Loaders/Backhoes	Diesel	Average	2.00	7.00	84.0	0.37
Grading	Rubber Tired Dozers	Diesel	Average	1.00	8.00	367	0.40
Building Construction	Cranes	Diesel	Average	1.00	6.00	367	0.29
Building Construction	Forklifts	Diesel	Average	1.00	6.00	82.0	0.20
Building Construction	Generator Sets	Diesel	Average	1.00	8.00	14.0	0.74
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	1.00	6.00	84.0	0.37
Building Construction	Welders	Diesel	Average	3.00	8.00	46.0	0.45
Paving	Tractors/Loaders/Backhoes	Diesel	Average	1.00	8.00	84.0	0.37
Paving	Pavers	Diesel	Average	1.00	6.00	81.0	0.42
Paving	Paving Equipment	Diesel	Average	1.00	8.00	89.0	0.36
Paving	Rollers	Diesel	Average	1.00	7.00	36.0	0.38
Paving	Cement and Mortar Mixers	Diesel	Average	1.00	6.00	10.0	0.56
Architectural Coating	Air Compressors	Diesel	Average	1.00	6.00	37.0	0.48

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	—	—	—	—
Demolition	Worker	12.5	18.5	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2	HHDT,MHDT
Demolition	Hauling	32.1	40.0	HHDT

Demolition	Onsite truck	—	—	HHDT
Grading	—	—	—	—
Grading	Worker	10.0	18.5	LDA,LDT1,LDT2
Grading	Vendor	—	10.2	HHDT,MHDT
Grading	Hauling	0.00	20.0	HHDT
Grading	Onsite truck	—	—	HHDT
Building Construction	—	—	—	—
Building Construction	Worker	32.9	18.5	LDA,LDT1,LDT2
Building Construction	Vendor	9.01	10.2	HHDT,MHDT
Building Construction	Hauling	0.00	20.0	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	—	—	—	—
Paving	Worker	12.5	18.5	LDA,LDT1,LDT2
Paving	Vendor	—	10.2	HHDT,MHDT
Paving	Hauling	0.00	20.0	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	—	—	—	—
Architectural Coating	Worker	6.59	18.5	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2	HHDT,MHDT
Architectural Coating	Hauling	0.00	20.0	HHDT
Architectural Coating	Onsite truck	—	—	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%
Sweep paved roads once per month	9%	9%

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	58,320	19,440	53,100	17,700	—

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (cy)	Material Exported (cy)	Acres Graded (acres)	Material Demolished (Building Square Footage)	Acres Paved (acres)
Demolition	0.00	0.00	0.00	64,200	—
Grading	—	—	23.0	0.00	—
Paving	0.00	0.00	0.00	0.00	0.00

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

Land Use	Area Paved (acres)	% Asphalt
Strip Mall	0.00	0%
General Office Building	0.00	0%
Medical Office Building	0.00	0%

Apartments Mid Rise	—	0%
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5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2024	0.00	532	0.03	< 0.005

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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat
Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6

Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00
Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096

Employed	92.6344155
Median HI	71.46156807
Education	—
Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0

Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0
Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4

Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—
Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
Construction: Construction Phases	See Note A.1
Construction: Trips and VMT	See Note A.2

Downtown SP Update - Operations (2024) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Operations (2024)
Operational Year	2024
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92112919374658, -118.41555573938703
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	130	1000sqft	2.98	130,000	0.00	—	—	—

General Office Building	200	1000sqft	4.59	200,000	0.00	—	—	—
Medical Office Building	24.0	1000sqft	0.55	24,000	0.00	—	—	—
Apartments Mid Rise	300	Dwelling Unit	7.89	288,000	0.00	—	888	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	47.8	58.0	36.8	419	0.90	0.81	78.1	79.0	0.76	19.8	20.6	547	99,642	100,189	60.0	3.79	360	103,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	42.8	53.3	39.9	352	0.86	0.78	78.1	78.9	0.74	19.8	20.6	547	95,698	96,245	60.1	3.97	13.2	98,946
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	40.4	51.2	35.9	340	0.76	0.73	67.8	68.5	0.69	17.2	17.9	547	86,092	86,639	59.6	3.54	139	89,323
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.38	9.35	6.55	62.0	0.14	0.13	12.4	12.5	0.13	3.14	3.27	90.5	14,254	14,344	9.87	0.59	23.0	14,789

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	43.1	38.6	34.0	385	0.88	0.58	78.1	78.7	0.54	19.8	20.4	—	89,927	89,927	4.14	3.43	356	91,409
Area	4.38	19.2	0.30	32.3	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	9,220	9,220	0.85	0.08	—	9,264
Water	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	47.8	58.0	36.8	419	0.90	0.81	78.1	79.0	0.76	19.8	20.6	547	99,642	100,189	60.0	3.79	360	103,177
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	42.6	38.1	37.3	350	0.84	0.58	78.1	78.7	0.54	19.8	20.4	—	86,093	86,093	4.30	3.62	9.23	87,287
Area	0.00	15.1	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
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	9,220	9,220	0.85	0.08	—	9,264
Water	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	42.8	53.3	39.9	352	0.86	0.78	78.1	78.9	0.74	19.8	20.6	547	95,698	96,245	60.1	3.97	13.2	98,946
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	37.1	33.2	33.1	316	0.75	0.51	67.8	68.3	0.47	17.2	17.7	—	76,412	76,412	3.75	3.19	135	77,590
Area	3.00	17.9	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	74.5	74.5	< 0.005	< 0.005	—	74.8
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	9,220	9,220	0.85	0.08	—	9,264
Water	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	40.4	51.2	35.9	340	0.76	0.73	67.8	68.5	0.69	17.2	17.9	547	86,092	86,639	59.6	3.54	139	89,323
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	6.78	6.05	6.04	57.7	0.14	0.09	12.4	12.5	0.09	3.14	3.23	—	12,651	12,651	0.62	0.53	22.3	12,846
Area	0.55	3.27	0.04	4.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4
Energy	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,526	1,526	0.14	0.01	—	1,534
Water	—	—	—	—	—	—	—	—	—	—	—	18.8	63.9	82.7	1.94	0.05	—	145
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66
Total	7.38	9.35	6.55	62.0	0.14	0.13	12.4	12.5	0.13	3.14	3.27	90.5	14,254	14,344	9.87	0.59	23.0	14,789

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	24.5	21.9	19.4	220	0.50	0.33	44.7	45.0	0.31	11.3	11.7	—	51,401	51,401	2.36	1.96	203	52,247
General Office Building	8.27	7.41	6.55	74.3	0.17	0.11	15.1	15.2	0.10	3.84	3.94	—	17,379	17,379	0.80	0.66	68.8	17,665
Medical Office Building	3.55	3.18	2.81	31.9	0.07	0.05	6.48	6.52	0.04	1.64	1.69	—	7,451	7,451	0.34	0.28	29.5	7,574

Apartments	6.80	6.11	5.23	59.1	0.13	0.09	11.9	12.0	0.08	3.02	3.10	—	13,696	13,696	0.64	0.53	54.1	13,923
Total	43.1	38.6	34.0	385	0.88	0.58	78.1	78.7	0.54	19.8	20.4	—	89,927	89,927	4.14	3.43	356	91,409
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	24.2	21.6	21.3	200	0.48	0.33	44.7	45.0	0.31	11.3	11.7	—	49,209	49,209	2.45	2.06	5.28	49,890
General Office Building	8.17	7.30	7.19	67.5	0.16	0.11	15.1	15.2	0.10	3.84	3.94	—	16,638	16,638	0.83	0.70	1.78	16,868
Medical Office Building	3.50	3.13	3.08	28.9	0.07	0.05	6.48	6.52	0.04	1.64	1.69	—	7,133	7,133	0.35	0.30	0.76	7,232
Apartments Mid Rise	6.71	6.02	5.74	53.8	0.13	0.09	11.9	12.0	0.08	3.02	3.10	—	13,113	13,113	0.67	0.56	1.40	13,297
Total	42.6	38.1	37.3	350	0.84	0.58	78.1	78.7	0.54	19.8	20.4	—	86,093	86,093	4.30	3.62	9.23	87,287
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	4.01	3.59	3.60	34.4	0.08	0.06	7.38	7.44	0.05	1.87	1.93	—	7,549	7,549	0.37	0.31	13.3	7,666
General Office Building	1.12	1.00	1.01	9.60	0.02	0.02	2.06	2.08	0.01	0.52	0.54	—	2,110	2,110	0.10	0.09	3.72	2,143
Medical Office Building	0.48	0.43	0.43	4.11	0.01	0.01	0.88	0.89	0.01	0.22	0.23	—	903	903	0.04	0.04	1.59	917
Apartments Mid Rise	1.16	1.04	1.01	9.61	0.02	0.02	2.04	2.05	0.01	0.52	0.53	—	2,089	2,089	0.10	0.09	3.68	2,121
Total	6.78	6.05	6.04	57.7	0.14	0.09	12.4	12.5	0.09	3.14	3.23	—	12,651	12,651	0.62	0.53	22.3	12,846

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	1,220	1,220	0.12	0.01	—	1,227
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,404	3,404	0.32	0.04	—	3,424
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	409	409	0.04	< 0.005	—	411
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,050	1,050	0.10	0.01	—	1,057
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,083	6,083	0.58	0.07	—	6,118
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	1,220	1,220	0.12	0.01	—	1,227
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	3,404	3,404	0.32	0.04	—	3,424
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	409	409	0.04	< 0.005	—	411
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	1,050	1,050	0.10	0.01	—	1,057
Total	—	—	—	—	—	—	—	—	—	—	—	—	6,083	6,083	0.58	0.07	—	6,118
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	202	202	0.02	< 0.005	—	203

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	564	564	0.05	0.01	—	567
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	67.6	67.6	0.01	< 0.005	—	68.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	174	174	0.02	< 0.005	—	175
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,007	1,007	0.10	0.01	—	1,013

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250
General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250

General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.3	41.3	< 0.005	< 0.005	—	41.4
General Office Building	0.03	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	270
Medical Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.3	32.3	< 0.005	< 0.005	—	32.4
Apartments Mid Rise	0.02	0.01	0.15	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.02	< 0.005	—	177
Total	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	519	519	0.05	< 0.005	—	521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.38	4.08	0.30	32.3	< 0.005	0.04	—	0.04	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Total	4.38	19.2	0.30	32.3	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	15.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.55	0.51	0.04	4.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Total	0.55	3.27	0.04	4.04	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	62.6	81.1	1.90	0.05	—	142
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	231	299	7.01	0.17	—	525
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	19.6	25.4	0.59	0.01	—	44.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	72.7	94.1	2.20	0.05	—	165
Total	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	62.6	81.1	1.90	0.05	—	142
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	231	299	7.01	0.17	—	525
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	19.6	25.4	0.59	0.01	—	44.4
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	72.7	94.1	2.20	0.05	—	165
Total	—	—	—	—	—	—	—	—	—	—	—	114	386	500	11.7	0.28	—	876

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	3.05	10.4	13.4	0.31	0.01	—	23.5
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	38.3	49.5	1.16	0.03	—	86.9
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.96	3.24	4.20	0.10	< 0.005	—	7.36
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.55	12.0	15.6	0.36	0.01	—	27.3
Total	—	—	—	—	—	—	—	—	—	—	—	18.8	63.9	82.7	1.94	0.05	—	145

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.6	0.00	16.6	1.66	0.00	—	58.1
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	23.1	0.00	23.1	2.31	0.00	—	80.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66

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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Strip Mall	5,762	5,465	2,656	1,925,589	63,010	59,768	29,045	21,058,532
General Office Building	1,948	442	140	538,219	21,304	4,834	1,531	5,886,040
Medical Office Building	835	206	34.1	230,250	9,134	2,249	373	2,518,053
Apartments Mid Rise	1,632	1,473	1,227	566,271	16,767	15,134	12,606	5,817,883

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
583200	194,400	531,000	177,000	—

5.10.3. Landscape Equipment

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)
Strip Mall	1,276,778	349	0.0330	0.0040	778,303
General Office Building	3,564,057	349	0.0330	0.0040	5,069,293
Medical Office Building	427,687	349	0.0330	0.0040	608,315
Apartments Mid Rise	1,099,750	349	0.0330	0.0040	3,332,053

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	9,629,428	0.00
General Office Building	35,546,750	0.00
Medical Office Building	3,011,533	0.00
Apartments Mid Rise	11,182,140	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	137	—
General Office Building	186	—
Medical Office Building	259	—
Apartments Mid Rise	222	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6
Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00

Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096
Employed	92.6344155
Median HI	71.46156807
Education	—

Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0
Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4
Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
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Operations: Hearths

See Note A.3

Downtown SP Update - Operations (2030) Detailed Report

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6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Operations (2030)
Operational Year	2030
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92112919374658, -118.41555573938703
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	130	1000sqft	2.98	130,000	0.00	—	—	—

General Office Building	200	1000sqft	4.59	200,000	0.00	—	—	—
Medical Office Building	24.0	1000sqft	0.55	24,000	0.00	—	—	—
Apartments Mid Rise	300	Dwelling Unit	7.89	288,000	0.00	—	888	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	37.2	48.6	25.0	323	0.79	0.65	78.1	78.7	0.62	19.8	20.4	547	87,363	87,910	59.1	3.16	182	90,509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	32.7	44.3	26.8	264	0.76	0.62	78.1	78.7	0.59	19.8	20.4	547	83,896	84,442	59.2	3.30	8.60	86,912
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	31.4	43.3	24.2	261	0.68	0.59	67.7	68.3	0.56	17.2	17.7	547	75,427	75,974	58.7	2.94	71.5	78,391
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	5.74	7.89	4.42	47.6	0.12	0.11	12.4	12.5	0.10	3.14	3.24	90.5	12,488	12,578	9.72	0.49	11.8	12,979

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.7	29.3	22.1	289	0.78	0.42	78.1	78.5	0.39	19.8	20.2	—	79,278	79,278	3.21	2.80	178	80,371
Area	4.30	19.1	0.29	32.5	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	37.2	48.6	25.0	323	0.79	0.65	78.1	78.7	0.62	19.8	20.4	547	87,363	87,910	59.1	3.16	182	90,509
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	32.4	29.0	24.2	262	0.74	0.42	78.1	78.5	0.39	19.8	20.2	—	75,920	75,920	3.32	2.94	4.62	76,883
Area	0.00	15.1	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
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	32.7	44.3	26.8	264	0.76	0.62	78.1	78.7	0.59	19.8	20.4	547	83,896	84,442	59.2	3.30	8.60	86,912
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	28.2	25.2	21.5	237	0.66	0.37	67.7	68.1	0.34	17.2	17.5	—	67,377	67,377	2.89	2.59	67.5	68,288
Area	2.94	17.9	0.20	22.2	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	74.5	74.5	< 0.005	< 0.005	—	74.8
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	31.4	43.3	24.2	261	0.68	0.59	67.7	68.3	0.56	17.2	17.7	547	75,427	75,974	58.7	2.94	71.5	78,391
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	5.15	4.61	3.92	43.2	0.12	0.07	12.4	12.4	0.06	3.14	3.20	—	11,155	11,155	0.48	0.43	11.2	11,306
Area	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4
Energy	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,273	1,273	0.14	0.01	—	1,280
Water	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66
Total	5.74	7.89	4.42	47.6	0.12	0.11	12.4	12.5	0.10	3.14	3.24	90.5	12,488	12,578	9.72	0.49	11.8	12,979

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	18.5	16.6	12.6	165	0.44	0.24	44.6	44.9	0.22	11.3	11.6	—	45,315	45,315	1.83	1.60	102	45,938
General Office Building	6.27	5.62	4.27	55.7	0.15	0.08	15.1	15.2	0.08	3.83	3.91	—	15,321	15,321	0.62	0.54	34.5	15,532
Medical Office Building	2.69	2.41	1.83	23.9	0.06	0.03	6.47	6.50	0.03	1.64	1.67	—	6,569	6,569	0.27	0.23	14.8	6,659

Apartments	5.15	4.64	3.42	44.3	0.12	0.06	11.9	11.9	0.06	3.02	3.07	—	12,074	12,074	0.50	0.43	27.1	12,242
Total	32.7	29.3	22.1	289	0.78	0.42	78.1	78.5	0.39	19.8	20.2	—	79,278	79,278	3.21	2.80	178	80,371
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	18.4	16.4	13.8	150	0.42	0.24	44.6	44.9	0.22	11.3	11.6	—	43,394	43,394	1.89	1.68	2.64	43,944
General Office Building	6.22	5.56	4.67	50.6	0.14	0.08	15.1	15.2	0.08	3.83	3.91	—	14,672	14,672	0.64	0.57	0.89	14,857
Medical Office Building	2.67	2.38	2.00	21.7	0.06	0.03	6.47	6.50	0.03	1.64	1.67	—	6,290	6,290	0.27	0.24	0.38	6,370
Apartments Mid Rise	5.11	4.59	3.74	40.4	0.11	0.06	11.9	11.9	0.06	3.02	3.07	—	11,563	11,563	0.51	0.45	0.70	11,712
Total	32.4	29.0	24.2	262	0.74	0.42	78.1	78.5	0.39	19.8	20.2	—	75,920	75,920	3.32	2.94	4.62	76,883
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	3.05	2.73	2.33	25.8	0.07	0.04	7.37	7.41	0.04	1.87	1.91	—	6,657	6,657	0.28	0.26	6.67	6,747
General Office Building	0.85	0.76	0.65	7.20	0.02	0.01	2.06	2.07	0.01	0.52	0.53	—	1,861	1,861	0.08	0.07	1.87	1,886
Medical Office Building	0.36	0.33	0.28	3.08	0.01	< 0.005	0.88	0.89	< 0.005	0.22	0.23	—	796	796	0.03	0.03	0.80	807
Apartments Mid Rise	0.88	0.79	0.65	7.21	0.02	0.01	2.04	2.05	0.01	0.52	0.53	—	1,842	1,842	0.08	0.07	1.84	1,867
Total	5.15	4.61	3.92	43.2	0.12	0.07	12.4	12.4	0.06	3.14	3.20	—	11,155	11,155	0.48	0.43	11.2	11,306

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	151	151	0.02	< 0.005	—	152

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	422	422	0.05	0.01	—	425
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	50.6	50.6	0.01	< 0.005	—	51.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	130	130	0.02	< 0.005	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	—	753	753	0.10	0.01	—	759

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250
General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250

General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.3	41.3	< 0.005	< 0.005	—	41.4
General Office Building	0.03	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	270
Medical Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.3	32.3	< 0.005	< 0.005	—	32.4
Apartments Mid Rise	0.02	0.01	0.15	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.02	< 0.005	—	177
Total	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	519	519	0.05	< 0.005	—	521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.30	4.00	0.29	32.5	< 0.005	0.04	—	0.04	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Total	4.30	19.1	0.29	32.5	< 0.005	0.04	—	0.04	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	15.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.50	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Total	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	3.05	7.75	10.8	0.31	0.01	—	20.9
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	28.6	39.9	1.16	0.03	—	77.2
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.96	2.43	3.38	0.10	< 0.005	—	6.54
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.55	9.00	12.6	0.36	0.01	—	24.3
Total	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.6	0.00	16.6	1.66	0.00	—	58.1
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	23.1	0.00	23.1	2.31	0.00	—	80.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251

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	TOG	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)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66

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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Strip Mall	5,762	5,465	2,656	1,925,589	63,010	59,768	29,045	21,058,532
General Office Building	1,948	442	140	538,219	21,304	4,834	1,531	5,886,040
Medical Office Building	835	206	34.1	230,250	9,134	2,249	373	2,518,053
Apartments Mid Rise	1,632	1,473	1,227	566,271	16,767	15,134	12,606	5,817,883

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
583200	194,400	531,000	177,000	—

5.10.3. Landscape Equipment

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)
Strip Mall	1,276,778	261	0.0330	0.0040	778,303
General Office Building	3,564,057	261	0.0330	0.0040	5,069,293
Medical Office Building	427,687	261	0.0330	0.0040	608,315
Apartments Mid Rise	1,099,750	261	0.0330	0.0040	3,332,053

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	9,629,428	0.00
General Office Building	35,546,750	0.00
Medical Office Building	3,011,533	0.00
Apartments Mid Rise	11,182,140	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	137	—
General Office Building	186	—
Medical Office Building	259	—
Apartments Mid Rise	222	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6
Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00

Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096
Employed	92.6344155
Median HI	71.46156807
Education	—

Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0
Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4
Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
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Operations: Hearths

See Note A.3

Downtown SP Update - Operations (2040) Detailed Report

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8. User Changes to Default Data

1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Downtown SP Update - Operations (2040)
Operational Year	2040
Lead Agency	—
Land Use Scale	Plan/community
Analysis Level for Defaults	County
Windspeed (m/s)	3.50
Precipitation (days)	17.6
Location	33.92112919374658, -118.41555573938703
County	Los Angeles-South Coast
City	El Segundo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	4534
EDFZ	7
Electric Utility	Southern California Edison
Gas Utility	Southern California Gas
App Version	2022.1.1.19

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
Strip Mall	130	1000sqft	2.98	130,000	0.00	—	—	—

General Office Building	200	1000sqft	4.59	200,000	0.00	—	—	—
Medical Office Building	24.0	1000sqft	0.55	24,000	0.00	—	—	—
Apartments Mid Rise	300	Dwelling Unit	7.89	288,000	0.00	—	888	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

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.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	29.6	41.9	17.8	266	0.70	0.50	77.9	78.4	0.47	19.8	20.2	547	78,094	78,640	58.1	2.57	40.8	80,900
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	25.2	37.8	19.0	212	0.67	0.46	77.9	78.4	0.44	19.8	20.2	547	74,931	75,478	58.1	2.68	4.93	77,736
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	24.9	37.6	17.3	214	0.60	0.45	67.6	68.0	0.43	17.1	17.6	547	67,492	68,039	57.8	2.41	17.9	70,220
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	4.55	6.87	3.15	39.0	0.11	0.08	12.3	12.4	0.08	3.13	3.21	90.5	11,174	11,265	9.58	0.40	2.97	11,626

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	25.0	22.6	15.0	232	0.69	0.26	77.9	78.2	0.24	19.8	20.0	—	70,009	70,009	2.24	2.21	36.8	70,762
Area	4.30	19.1	0.29	32.5	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	29.6	41.9	17.8	266	0.70	0.50	77.9	78.4	0.47	19.8	20.2	547	78,094	78,640	58.1	2.57	40.8	80,900
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	24.9	22.6	16.4	210	0.66	0.26	77.9	78.2	0.24	19.8	20.0	—	66,955	66,955	2.30	2.33	0.96	67,707
Area	0.00	15.1	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
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	25.2	37.8	19.0	212	0.67	0.46	77.9	78.4	0.44	19.8	20.2	547	74,931	75,478	58.1	2.68	4.93	77,736
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	21.7	19.6	14.5	190	0.58	0.23	67.6	67.8	0.21	17.1	17.4	—	59,442	59,442	2.01	2.05	14.0	60,117
Area	2.95	17.9	0.20	22.3	< 0.005	0.02	—	0.02	0.02	—	0.02	0.00	74.5	74.5	< 0.005	< 0.005	—	74.8
Energy	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	7,687	7,687	0.85	0.08	—	7,731
Water	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Waste	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Total	24.9	37.6	17.3	214	0.60	0.45	67.6	68.0	0.43	17.1	17.6	547	67,492	68,039	57.8	2.41	17.9	70,220
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.96	3.58	2.65	34.6	0.11	0.04	12.3	12.4	0.04	3.13	3.17	—	9,841	9,841	0.33	0.34	2.31	9,953
Area	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4
Energy	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	1,273	1,273	0.14	0.01	—	1,280
Water	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129
Waste	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66
Total	4.55	6.87	3.15	39.0	0.11	0.08	12.3	12.4	0.08	3.13	3.21	90.5	11,174	11,265	9.58	0.40	2.97	11,626

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	14.2	12.8	8.53	133	0.39	0.15	44.6	44.7	0.14	11.3	11.4	—	40,016	40,016	1.27	1.26	21.1	40,446
General Office Building	4.80	4.34	2.88	44.8	0.13	0.05	15.1	15.1	0.05	3.82	3.87	—	13,530	13,530	0.43	0.43	7.12	13,675
Medical Office Building	2.06	1.86	1.24	19.2	0.06	0.02	6.46	6.48	0.02	1.64	1.66	—	5,801	5,801	0.18	0.18	3.05	5,863

Apartments	3.94	3.58	2.32	35.6	0.10	0.04	11.9	11.9	0.04	3.01	3.05	—	10,663	10,663	0.35	0.34	5.60	10,779
Total	25.0	22.6	15.0	232	0.69	0.26	77.9	78.2	0.24	19.8	20.0	—	70,009	70,009	2.24	2.21	36.8	70,762
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	14.1	12.8	9.35	120	0.38	0.15	44.6	44.7	0.14	11.3	11.4	—	38,270	38,270	1.31	1.33	0.55	38,699
General Office Building	4.78	4.33	3.16	40.5	0.13	0.05	15.1	15.1	0.05	3.82	3.87	—	12,939	12,939	0.44	0.45	0.18	13,084
Medical Office Building	2.05	1.86	1.36	17.4	0.05	0.02	6.46	6.48	0.02	1.64	1.66	—	5,548	5,548	0.19	0.19	0.08	5,610
Apartments Mid Rise	3.93	3.57	2.54	32.3	0.10	0.04	11.9	11.9	0.04	3.01	3.05	—	10,198	10,198	0.36	0.36	0.15	10,314
Total	24.9	22.6	16.4	210	0.66	0.26	77.9	78.2	0.24	19.8	20.0	—	66,955	66,955	2.30	2.33	0.96	67,707
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	2.35	2.12	1.57	20.6	0.06	0.03	7.36	7.39	0.02	1.87	1.89	—	5,873	5,873	0.20	0.20	1.38	5,939
General Office Building	0.66	0.59	0.44	5.76	0.02	0.01	2.06	2.06	0.01	0.52	0.53	—	1,642	1,642	0.06	0.06	0.39	1,660
Medical Office Building	0.28	0.25	0.19	2.47	0.01	< 0.005	0.88	0.88	< 0.005	0.22	0.23	—	702	702	0.02	0.02	0.16	710
Apartments Mid Rise	0.68	0.61	0.44	5.77	0.02	0.01	2.03	2.04	0.01	0.52	0.52	—	1,625	1,625	0.06	0.06	0.38	1,643
Total	3.96	3.58	2.65	34.6	0.11	0.04	12.3	12.4	0.04	3.13	3.17	—	9,841	9,841	0.33	0.34	2.31	9,953

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	912	912	0.12	0.01	—	919
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	2,546	2,546	0.32	0.04	—	2,566
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	306	306	0.04	< 0.005	—	308
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	786	786	0.10	0.01	—	792
Total	—	—	—	—	—	—	—	—	—	—	—	—	4,550	4,550	0.58	0.07	—	4,585
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	151	151	0.02	< 0.005	—	152

General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	422	422	0.05	0.01	—	425
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	50.6	50.6	0.01	< 0.005	—	51.0
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	130	130	0.02	< 0.005	—	131
Total	—	—	—	—	—	—	—	—	—	—	—	—	753	753	0.10	0.01	—	759

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250
General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	0.02	0.01	0.21	0.18	< 0.005	0.02	—	0.02	0.02	—	0.02	—	249	249	0.02	< 0.005	—	250

General Office Building	0.15	0.07	1.36	1.14	0.01	0.10	—	0.10	0.10	—	0.10	—	1,625	1,625	0.14	< 0.005	—	1,629
Medical Office Building	0.02	0.01	0.16	0.14	< 0.005	0.01	—	0.01	0.01	—	0.01	—	195	195	0.02	< 0.005	—	195
Apartments Mid Rise	0.10	0.05	0.84	0.36	0.01	0.07	—	0.07	0.07	—	0.07	—	1,068	1,068	0.09	< 0.005	—	1,071
Total	0.29	0.14	2.58	1.81	0.02	0.20	—	0.20	0.20	—	0.20	—	3,137	3,137	0.28	0.01	—	3,146
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	< 0.005	< 0.005	0.04	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	41.3	41.3	< 0.005	< 0.005	—	41.4
General Office Building	0.03	0.01	0.25	0.21	< 0.005	0.02	—	0.02	0.02	—	0.02	—	269	269	0.02	< 0.005	—	270
Medical Office Building	< 0.005	< 0.005	0.03	0.03	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	32.3	32.3	< 0.005	< 0.005	—	32.4
Apartments Mid Rise	0.02	0.01	0.15	0.07	< 0.005	0.01	—	0.01	0.01	—	0.01	—	177	177	0.02	< 0.005	—	177
Total	0.05	0.03	0.47	0.33	< 0.005	0.04	—	0.04	0.04	—	0.04	—	519	519	0.05	< 0.005	—	521

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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

Consumer	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	4.30	4.01	0.29	32.5	< 0.005	0.03	—	0.03	0.03	—	0.03	—	109	109	< 0.005	< 0.005	—	109
Total	4.30	19.1	0.29	32.5	< 0.005	0.03	—	0.03	0.03	—	0.03	0.00	109	109	< 0.005	< 0.005	—	109
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	13.7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	1.39	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	0.00	15.1	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	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
Consumer Products	—	2.51	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	—	0.25	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.54	0.50	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	—	12.3	12.3	< 0.005	< 0.005	—	12.4
Total	0.54	3.26	0.04	4.06	< 0.005	< 0.005	—	< 0.005	< 0.005	—	< 0.005	0.00	12.3	12.3	< 0.005	< 0.005	—	12.4

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	18.5	46.8	65.3	1.90	0.05	—	126
General Office Building	—	—	—	—	—	—	—	—	—	—	—	68.1	173	241	7.01	0.17	—	466
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	5.77	14.6	20.4	0.59	0.01	—	39.5
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	21.4	54.4	75.8	2.20	0.05	—	147
Total	—	—	—	—	—	—	—	—	—	—	—	114	289	403	11.7	0.28	—	779

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	3.05	7.75	10.8	0.31	0.01	—	20.9
General Office Building	—	—	—	—	—	—	—	—	—	—	—	11.3	28.6	39.9	1.16	0.03	—	77.2
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	0.96	2.43	3.38	0.10	< 0.005	—	6.54
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	3.55	9.00	12.6	0.36	0.01	—	24.3
Total	—	—	—	—	—	—	—	—	—	—	—	18.8	47.8	66.6	1.94	0.05	—	129

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	73.6	0.00	73.6	7.35	0.00	—	257
General Office Building	—	—	—	—	—	—	—	—	—	—	—	100	0.00	100	10.0	0.00	—	351
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	140	0.00	140	14.0	0.00	—	489
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	120	0.00	120	11.9	0.00	—	418
Total	—	—	—	—	—	—	—	—	—	—	—	433	0.00	433	43.3	0.00	—	1,515
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	12.2	0.00	12.2	1.22	0.00	—	42.6
General Office Building	—	—	—	—	—	—	—	—	—	—	—	16.6	0.00	16.6	1.66	0.00	—	58.1
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	23.1	0.00	23.1	2.31	0.00	—	80.9
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	19.8	0.00	19.8	1.98	0.00	—	69.3
Total	—	—	—	—	—	—	—	—	—	—	—	71.7	0.00	71.7	7.17	0.00	—	251

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	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
----------	-----	-----	-----	----	-----	-------	-------	-------	--------	--------	--------	------	-------	------	-----	-----	---	------

Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.81	0.81
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.49	0.49
Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.61	0.61
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2.06	2.06
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3.97	3.97
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Strip Mall	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.13	0.13
General Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.08	0.08

Medical Office Building	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.10	0.10
Apartments Mid Rise	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.34	0.34
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.66	0.66

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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	TOG	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	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Sequest	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Remove d	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
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
Strip Mall	5,762	5,465	2,656	1,925,589	63,010	59,768	29,045	21,058,532
General Office Building	1,948	442	140	538,219	21,304	4,834	1,531	5,886,040
Medical Office Building	835	206	34.1	230,250	9,134	2,249	373	2,518,053
Apartments Mid Rise	1,632	1,473	1,227	566,271	16,767	15,134	12,606	5,817,883

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

Hearth Type	Unmitigated (number)
Apartments Mid Rise	—
Wood Fireplaces	0
Gas Fireplaces	0

Propane Fireplaces	0
Electric Fireplaces	0
No Fireplaces	0
Conventional Wood Stoves	0
Catalytic Wood Stoves	0
Non-Catalytic Wood Stoves	0
Pellet Wood Stoves	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)
583200	194,400	531,000	177,000	—

5.10.3. Landscape Equipment

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)
Strip Mall	1,276,778	261	0.0330	0.0040	778,303
General Office Building	3,564,057	261	0.0330	0.0040	5,069,293
Medical Office Building	427,687	261	0.0330	0.0040	608,315
Apartments Mid Rise	1,099,750	261	0.0330	0.0040	3,332,053

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Strip Mall	9,629,428	0.00
General Office Building	35,546,750	0.00
Medical Office Building	3,011,533	0.00
Apartments Mid Rise	11,182,140	0.00

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Strip Mall	137	—
General Office Building	186	—
Medical Office Building	259	—
Apartments Mid Rise	222	—

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use Type	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Strip Mall	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Strip Mall	Stand-alone retail refrigerators and freezers	R-134a	1,430	0.04	1.00	0.00	1.00

Strip Mall	Walk-in refrigerators and freezers	R-404A	3,922	< 0.005	7.50	7.50	20.0
General Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.02	0.60	0.00	1.00
General Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Medical Office Building	Household refrigerators and/or freezers	R-134a	1,430	0.45	0.60	0.00	1.00
Medical Office Building	Other commercial A/C and heat pumps	R-410A	2,088	< 0.005	4.00	4.00	18.0
Apartments Mid Rise	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088	< 0.005	2.50	2.50	10.0
Apartments Mid Rise	Household refrigerators and/or freezers	R-134a	1,430	0.12	0.60	0.00	1.00

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
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5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

Equipment Type	Fuel Type	Number per Day	Hours per Day	Hours per Year	Horsepower	Load Factor
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5.16.2. Process Boilers

Equipment Type	Fuel Type	Number	Boiler Rating (MMBtu/hr)	Daily Heat Input (MMBtu/day)	Annual Heat Input (MMBtu/yr)
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5.17. User Defined

Equipment Type	Fuel Type
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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
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5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres
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5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)
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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	0.00	annual days of extreme heat

Extreme Precipitation	0.00	annual days with precipitation above 20 mm
Sea Level Rise	0.00	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 (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth 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 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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	N/A	N/A	N/A	N/A
Extreme Precipitation	N/A	N/A	N/A	N/A
Sea Level Rise	N/A	N/A	N/A	N/A
Wildfire	N/A	N/A	N/A	N/A
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	N/A	N/A	N/A	N/A

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

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	32.1
AQ-PM	72.0
AQ-DPM	95.6
Drinking Water	8.95
Lead Risk Housing	48.9
Pesticides	0.00

Toxic Releases	89.9
Traffic	62.7
Effect Indicators	—
CleanUp Sites	58.6
Groundwater	69.2
Haz Waste Facilities/Generators	98.7
Impaired Water Bodies	58.7
Solid Waste	39.0
Sensitive Population	—
Asthma	12.8
Cardio-vascular	22.0
Low Birth Weights	19.6
Socioeconomic Factor Indicators	—
Education	6.52
Housing	33.2
Linguistic	4.59
Poverty	23.7
Unemployment	58.4

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	82.8564096
Employed	92.6344155
Median HI	71.46156807
Education	—

Bachelor's or higher	79.82805081
High school enrollment	100
Preschool enrollment	35.76286411
Transportation	—
Auto Access	74.57975106
Active commuting	69.25445913
Social	—
2-parent households	91.08174002
Voting	57.05119979
Neighborhood	—
Alcohol availability	23.32862826
Park access	81.35506224
Retail density	45.61786218
Supermarket access	2.399589375
Tree canopy	4.632362376
Housing	—
Homeownership	17.68253561
Housing habitability	76.6970358
Low-inc homeowner severe housing cost burden	78.73732837
Low-inc renter severe housing cost burden	95.39330168
Uncrowded housing	59.34813294
Health Outcomes	—
Insured adults	73.78416528
Arthritis	0.0
Asthma ER Admissions	84.5
High Blood Pressure	0.0
Cancer (excluding skin)	0.0

Asthma	0.0
Coronary Heart Disease	0.0
Chronic Obstructive Pulmonary Disease	0.0
Diagnosed Diabetes	0.0
Life Expectancy at Birth	68.8
Cognitively Disabled	87.2
Physically Disabled	80.2
Heart Attack ER Admissions	65.4
Mental Health Not Good	0.0
Chronic Kidney Disease	0.0
Obesity	0.0
Pedestrian Injuries	19.6
Physical Health Not Good	0.0
Stroke	0.0
Health Risk Behaviors	—
Binge Drinking	0.0
Current Smoker	0.0
No Leisure Time for Physical Activity	0.0
Climate Change Exposures	—
Wildfire Risk	0.0
SLR Inundation Area	0.0
Children	31.0
Elderly	69.3
English Speaking	78.4
Foreign-born	14.4
Outdoor Workers	77.2
Climate Change Adaptive Capacity	—

Impervious Surface Cover	19.2
Traffic Density	43.5
Traffic Access	23.0
Other Indices	—
Hardship	11.3
Other Decision Support	—
2016 Voting	48.5

7.3. Overall Health & Equity Scores

Metric	Result for Project Census Tract
CalEnviroScreen 4.0 Score for Project Location (a)	26.0
Healthy Places Index Score for Project Location (b)	79.0
Project Located in a Designated Disadvantaged Community (Senate Bill 535)	No
Project Located in a Low-Income Community (Assembly Bill 1550)	No
Project Located in a Community Air Protection Program Community (Assembly Bill 617)	No

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

Screen	Justification
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Operations: Hearths

See Note A.3

Downtown Specific Plan Update

CalEEMod Notes

- Note A.1** Construction phases were modified to represent a scenario in which construction phases for the given land uses occur simultaneously. The demolition, grading, and architectural coatings phases were extended to one month to more realistically reflect the levels of demolition, grading, and coatings that would be required for construction of the given land uses, based on the consultant's experience.
- Note A.2** Haul trip lengths were conservatively increased to 40 miles (one way) to reflect a range of possible landfills or receiving locations, as they are not known at this time.
- Note A.3** Residential land uses would not contain hearths or woodstoves.

APPENDIX G: NOISE STUDY

Noise Study

**El Segundo Downtown Specific Plan
Update Project**

September 13, 2023

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1. Introduction

This chapter describes the existing noise environment in the planning area, anticipated changes in the noise environment resulting from implementation of the El Segundo Downtown Specific Plan Update Project (Project), and related impacts and mitigation needs.

2. Project Description

The Project involves an update to the City's adopted Downtown Specific Plan that would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes. The Project would allow for increases of up to 130,000 square feet of retail and restaurant uses, 200,000 square feet of office uses, 24,000 square feet of medical office uses, and 300 residential uses. Mobility enhancements would include expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which could affect the number of travel lanes on those streets. The Project would potentially relocate a portion of an existing truck route that is located on Main Street. It proposes the potential permanent closure of a portion of Richmond Street to vehicles, and a variety of other minor pedestrian and transit improvements (e.g., widened sidewalks, expanded outdoor seating and dining areas, bus stop enhancements, etc.). The Project would also include modifications to parking standards and strategies, as well as alternatives for on-street parking. Relatedly, the Project may potentially involve the construction of two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue.

3. Environmental Setting

3.1 Fundamentals of Sound and Environmental Noise

Sound can be described in terms of its loudness (amplitude) and frequency (pitch). The standard unit of measurement for sound is the decibel, abbreviated dB. Because the human ear is not equally sensitive to sound at all frequencies, the A-weighted scale (dBA) is used to reflect the normal hearing sensitivity range of the human ear. **Table 1** provides examples of A-weighted noise levels from common sources. Although the terms "sound" and "noise" are often used synonymously, noise is commonly defined as sound that is either loud, unpleasant, unexpected, or undesired.¹ Because decibels are logarithmic units, they cannot be simply added or subtracted. For example, two cars each producing 60 dBA of noise would not produce a combined 120 dBA.

¹ California Department of Transportation (Caltrans), Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

**Table 1
Typical Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
Jet flyover at 1,000 feet	-110-	Rock band
Gas lawnmower at 3 feet	-100-	
Diesel truck at 50 feet at 50 mph	-90-	Food blender at 3 feet
Noise urban area, daytime	-80-	Garbage disposal at 3 feet
Gas lawnmower at 100 feet	-70-	Vacuum cleaner at 10 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	-60-	Large business office
Quiet urban daytime	-50-	Dishwasher in next room
Quiet urban nighttime	-40-	Theater, large conference room
Quiet suburban nighttime		
	-30-	Library
Quiet rural nighttime		Bedroom at night, concert hall
	-20-	
	-10-	Broadcast/recording studio
Lowest threshold of human hearing	-0-	Lowest threshold of human hearing
<p><i>Note: These noise levels are approximations intended for general reference and informational use. They do not meet the standard required for detailed noise analysis but are provided for the reader to gain a rudimentary concept of various noise levels.</i></p> <p><i>Source: Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol (Figure 15-1), September 2013.</i></p>		

3.1.1 Noise Definitions

This noise analysis discusses sound levels in terms of equivalent noise level (L_{eq}), maximum noise level (L_{max}), minimum noise level (L_{min}), and Community Noise Equivalent Level (CNEL). Statistical descriptors (L_x) are also discussed.

Equivalent Noise Level (L_{eq})

L_{eq} represents the equivalent steady-state noise level for a stated period of time that would contain the same acoustic energy as the fluctuating, time-varying noise level of that same period. For example, the L_{eq} for one hour is the energy average noise level for that hour. L_{eq} can be thought of as a continuous noise level for a certain period that is equivalent in acoustic energy content to a fluctuating noise level of that same period. In this report L_{eq} is expressed in units of dBA.

Maximum Noise Level (L_{max})

L_{max} represents the highest instantaneous noise level of a specified time period.

Minimum Noise Level (L_{min})

L_{min} represents the lowest instantaneous noise level of a specified time period.

Community Noise Equivalent Level (CNEL)

CNEL is a weighted noise measurement scale of average sound level during a 24-hour period. Due to increased noise sensitivities during evening and night hours, human reaction to sound between 7:00 P.M. and 10:00 P.M. is as if it were actually 5 dBA higher than had it occurred between 7:00 A.M. and 7:00 P.M. From 10:00 P.M. to 7:00 A.M., humans perceive sound as if it were 10 dBA higher. To account for these sensitivities, CNEL penalizes evening noise levels between 7:00 P.M. and 10:00 P.M. by an additional 5 dBA and nighttime noise levels between 10:00 P.M. and 7:00 A.M. by an additional 10 dBA. Because of this, 24-hour CNEL figures are always higher than their corresponding 24-hour L_{eq} .

Statistical Descriptor (L_x)

L_x is used to represent the noise level exceeded $X\%$ of a specified time period. For example, L_{90} represents the noise level that is exceeded 90% of a specified time period. L_{90} is commonly used to represent ambient or background steady-state noise levels.²

3.1.2 Effects of Environmental Noise

The degree to which noise can impact an environment ranges from levels that interfere with speech and sleep to levels that can cause adverse health effects. Most human response to noise is subjective. Factors that influence individual responses may include the intensity, frequency, and pattern of noise; the amount of background or existing noise present; and the nature of work or human activity that is exposed to intruding noise.

According to the National Institute of Health (NIH), extended or repeated exposure to sounds at or above 85 dB can cause hearing loss. Sounds of 75 dBA or less, even after continuous and repeated exposure, are unlikely to cause hearing loss.³ The World Health Organization (WHO)

² Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

³ National Institute of Health, National Institute on Deafness and Other Communication. www.nidcd.nih.gov/health/noise-induced-hearing-loss.

reports that adults should not be exposed to sudden “impulse” noise events of 140 dB or greater. For children, this limit is 120 dB.⁴

Exposure to elevated nighttime noise levels can disrupt sleep, leading to increased levels of fatigue and decreased work or school performance. For the preservation of healthy sleeping environments, the WHO recommends that continuous interior noise levels should not exceed 30 dBA L_{eq} and that individual noise events of 45 dBA or higher be limited.⁵

Some epidemiological studies have shown a weak association between long-term exposure to noise levels of 65 to 70 dBA L_{eq} or greater and cardiovascular effects, including ischaemic heart disease and hypertension. However, at this time, the relationship is largely inconclusive.

It is generally accepted that people with normal hearing sensitivity can barely perceive a 3 dBA change in noise levels, though if changes occur to the character of a sound (i.e., changes to the frequency content), then changes less than 3 dBA may be more noticeable.⁶ Changes of 5 dBA may be readily perceptible, and changes of 10 dBA are perceived as a doubling in loudness.⁷ However, few people are highly annoyed by daytime noise levels below 55 dBA.⁸

Loud noises, such as those from construction activities, can interfere with peoples’ abilities to effectively communicate via speech, as well as other activities, resulting in annoyance or inconvenience. Other common daily activities that may be disrupted by elevated interior noise levels include watching television, listening to music, or activities requiring concentration (such as reading). The EPA has found that a home interior noise level of 45 dBA L_{eq} generally protects speech and communication by providing 100% intelligibility of speech sounds.⁹ The EPA has determined that, given the preservation of an indoor noise level associated with 100% speech intelligibility (i.e., 45 dBA L_{eq}), the average community reaction is not evident and “7 dBA below levels associated with significant complaints and threats of legal action.” Any complaints and annoyance are dependent on “attitude and other non-level related factors.”

3.1.3 Noise Attenuation

Generally speaking, noise levels decrease, or “attenuate,” as distances from noise sources to receivers increases. For each doubling of distance, noise from stationary or small, localized sources, commonly referred to as “point sources,” may attenuate at a rate of 6 dBA for each doubling of distance. This attenuation is referred to as the inverse square law. For example, if a point source emits a noise level of 80 dBA at a reference distance of 50 feet its noise level would be approximately 74 dBA at a distance of 100 feet, 68 dBA at a distance of 200 feet, etc. Noise emitted by “line” sources, such as highways, attenuates at the rate of 3 dBA for each doubling of distance.¹⁰

⁴ World Health Organization, Guidelines for Community Noise, 1999.

⁵ World Health Organization, Guidelines for Community Noise, 1999.

⁶ Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

⁷ Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, September 2013.

⁸ World Health Organization, Guidelines for Community Noise, 1999.

⁹ EPA, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety, 1974.

¹⁰ Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, April 2020.

Factors such as ground absorption and atmospheric effects may also affect the propagation of noise. In particular, ground attenuation by non-reflective surfaces such as soft dirt or grass may contribute to increased attenuation rates of up to an additional 8-10 dBA per doubling of distance.¹¹

Noise is most audible when traveling by direct line of sight, an unobstructed visual path between a noise source and a receiver. Barriers that break the line of sight between noise sources and receivers, such as walls and buildings, can greatly reduce source noise levels by allowing noise to reach receivers by diffraction only. Barriers can reduce source noise levels by up to 20 dBA, though it is generally infeasible for temporary barriers to reduce source noise levels by more than 15 dBA.¹² In cases where the noise path from source to receiver is direct but grazes the top of a barrier, noise attenuation of up to 5 dBA may still occur.¹³

3.2 Fundamentals of Vibration

Vibration is an oscillatory motion that can be described in terms of displacement, velocity, and acceleration.¹⁴ Unlike noise, vibration is not a common environmental issue, as it is unusual for vibration from vehicle sources to be perceptible. Common sources of vibration may include trains, construction activities, and some industrial operations.

3.2.1 Vibration Definitions

This analysis discusses vibration in terms of Peak Particle Velocity (PPV):

Peak Particle Velocity (PPV)

PPV is commonly used to describe and quantify vibration impacts to buildings and other structures. PPV levels represent the maximum instantaneous peak of a vibration signal and are generally measured in inches per second (in/sec).¹⁵

3.2.2 Effects of Vibration

High levels of vibration may cause damage to buildings or even physical personal injury. However, vibration levels rarely affect human health outside the personal operation of certain construction equipment or industrial tools. Instead, most people consider environmental vibration to be an annoyance that may affect concentration or disturb sleep. Background vibration in residential areas is usually not perceptible, and perceptible indoor vibrations are generally caused by sources within buildings themselves, such as slamming doors or heavy footsteps. Vibration from traffic on smooth roadways is rarely perceptible, even from larger vehicles such as buses or trucks.¹⁶ The threshold of human perception of vibration is approximately 0.01-0.02 in/sec PPV.¹⁷

¹¹ Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, April 2020.

¹² Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, April 2020.

¹³ Caltrans, Technical Noise Supplement to the Traffic Noise Analysis Protocol, April 2020.

¹⁴ Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

¹⁵ Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.

¹⁶ Caltrans, Transportation and Construction Vibration Guidance Manual, April 2020.

¹⁷ Caltrans, Transportation and Construction Vibration Guidance Manual, April 2020.

3.3 Regulatory Framework

3.3.1 Federal

Currently, no federal noise standards regulate environmental noise and vibration associated with temporary construction activities or the long-term operations of development projects. As such, temporary and long-term noise and vibration impacts resultant from the Project would be largely regulated or otherwise evaluated by State and City of El Segundo standards designed to protect public well-being and health.

3.3.2 State

3.3.2.1 2017 General Plan Guidelines

The State of California's 2017 General Plan Guidelines propose county and city standards for acceptable exterior noise levels based on land use. These standards are incorporated into land use planning processes to prevent or reduce noise and land use incompatibilities. The State's suggested compatibility considerations between various land uses and exterior noise levels are not regulatory in nature, but are recommendations intended to aid communities in determining their own noise-acceptability standards.

3.3.2.2 California Department of Transportation (Caltrans)

To aid in the evaluation of groundborne vibration impacts, Caltrans guidelines and recommendations are used given the absence of applicable quantitative City standards.

Though not regulatory in nature, Caltrans has established vibration impact criteria for buildings and human responses (i.e., annoyance). **Table 3** shows Caltrans' "guideline vibration damage potential threshold criteria" for building and structural damage. **Table 4** shows Caltrans' "guideline vibration annoyance potential criteria" for human responses.

**Table 3
Caltrans Guideline Vibration Damage Potential Threshold Criteria**

Structure and Condition	Maximum PPV (in/sec)	
	Transient Sources	Continuous/ Frequent/ Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5
<p><i>Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent/intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.</i></p> <p><i>Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.</i></p>		

**Table 4
Caltrans Guideline Vibration Annoyance Potential Criteria**

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/ Frequent/ Intermittent Sources
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4
<p><i>Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent/intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.</i></p> <p><i>Source: Federal Transit Administration, Transit Noise and Vibration Impact Assessment, September 2018.</i></p>		

3.3.3 City of El Segundo

3.3.3.1 El Segundo General Plan Noise Element

The City's General Plan Noise Element is intended to be used as a guide in public and private development matters related to outdoor noise.¹⁸ The Noise Element contains the following goals, objectives, policies, and programs designed to minimized existing and foreseeable noise impacts in the City:

Goal N1: Provision of a Noise-Safe Environment

Encourage a high quality environment within all parts of the City of El Segundo where the public's health, safety, and welfare are not adversely affected by excessive noise.

Objective N1-1: It is the objective of the City of El Segundo to ensure that City residents are not exposed to mobile noise levels in excess of the interior and exterior noise standards or the single event noise standards specified in the El Segundo Municipal Code.

Policy N1-1.1: Continue to work for the elimination of adverse noise sources, especially from Los Angeles International Airport West Imperial Terminal, and from helicopter and aircraft flyovers.

Program N1-1.1A: The City shall implement the Airport Abatement Policy and Program (City Council Resolution No. 3691, adopted May 21, 1991, or any future revisions thereto) in its efforts to minimize noise impacts caused by LAX.

Policy N1-1.2: Play an active role in the planning process associated with preparation of the Los Angeles International Airport Master Plan.

Program N1-1.2A: Encourage the City of Los Angeles Department of Airports to adopt and maintain a passenger service level goal and implementation program which will minimize the noise impacts to the City of El Segundo.

Policy N1-1.3: Continue to work with the City of Los Angeles Department of Airports to reduce the noise-impacted area around Los Angeles International Airport to zero.

Program N1-1.3A: Where feasible, the City should use noise barriers to mitigate noise problems that cannot be reduced at their source. Sound walls, berms, and dense

¹⁸ City of El Segundo, General Plan Noise Element, 1992.

landscaping shall be used to reduce exterior noise to levels specified in the City's Noise Ordinance.

Program N1-1.3B: Encourage the City of Los Angeles Department of Airports to pay the additional costs for new residential construction to provide acoustical treatment to mitigate noise impacts to a level that meets land use compatibility standards.

Policy N1-1.4: Consider noise impacts from traffic arterials and railroads, as well as aircraft, when identifying potential new areas for residential land use.

Program N1-1.4A: All plans submitted for development review shall depict the Department of Airport's latest available noise contours for LAX and citywide noise contours.

Policy N1-1.5: Encourage state inspection and enforcement of noise standards for motor vehicles, including those involved in public transit.

Program N1-1.5A: To the degree feasible, monitor noise levels along Sepulveda Boulevard (State Route 1) and, if warranted, work with the state to ensure inspection and enforcement of noise standards for motor vehicles, including public transit.

Policy N1-1.6: Encourage the State Department of Transportation (DOT) to conduct an active highway noise abatement program with scenic/aesthetic consideration for Sepulveda Boulevard (State Route 1).

Program N1-1.6A: To the degree feasible, the City shall participate with DOT in the development of a highway noise abatement program for Sepulveda Boulevard (State Route 1).

Policy N1-1.7: Monitor California Department of Transportation and Los Angeles County Transportation Commission noise abatement measures aimed at minimizing noise impacts associated with the I-105 Freeway and the Metro Rail Green Line [now the C Line].

Program N1-1.7A: Existing and projected noise environments shall be evaluated when considering alterations to the City circulation system.

Program N1-1.7B: Where feasible, the City shall provide adequate setbacks or require noise abatement barriers along the I-105 Freeway in order to protect new development from noise levels above exterior standards.

Program N1-1.7C: All new roadways shall incorporate the following noise mitigation measures into their design: alignment, barriers, vertical profile, and lateral separation.

Policy N1-1.8: Continue to develop zoning, subdivision, and development controls to prevent future encroachment of noise-sensitive uses into present or planned industrial or transportation system noise-impacted zones where adverse effects cannot be adequately mitigated.

Policy N1-1.9: Require review of all new development projects in the City for conformance with California Airport Noise Regulations and California Noise Insulation Standards (CCR Title 24) to ensure interior noise will not exceed acceptable levels.

Program N1-1.9A: All new habitable residential construction in areas of the City with an annual CNEL of 60 dBA or higher shall include all mitigation measures necessary to reduce interior noise levels to minimum state standards. Post construction acoustical analysis shall be performed to demonstrate compliance.

Policy N1-1.10: Continue to develop and implement City programs to incorporate noise reduction measures into existing residential development where interior noise levels exceed acceptable standards.

Objective N1-2: It is the objective of the City of El Segundo to ensure that City residents are not exposed to stationary noise levels in excess of El Segundo's Noise Ordinance standards.

Policy N1-2.1: Require all new projects to meet the City's Noise Ordinance Standards as a condition of building permit approval.

Program N1-2.1A: Address noise impacts in all environmental documents for discretionary approval projects, to ensure that noise sources meet City Noise Ordinance standards. These sources may include: mechanical or electrical equipment, truck loading areas, or outdoor speaker systems.

Program N1-2.1B: The City shall establish criteria for determining the type and size of projects that should submit a construction-related noise mitigation plan. Noise mitigation plans shall be submitted to the City Engineer for his review and approval prior to issuance of a grading permit. The plan must display the location of construction equipment and how this noise will be mitigated. These mitigation measures

may involve noise suppression equipment and/or the use of temporary barriers.

Program N1-2.1C: The City shall strictly enforce the El Segundo Municipal Code's time-dependent noise standards for stationary sources. Two of the major sources which shall be closely monitored are industrial facilities and construction activities.

Objective N1-3: It is the objective of the City of El Segundo that the City maintain intergovernmental coordination and public information programs which are highly efficient in their noise abatement efforts.

Policy N1-3.1: Encourage site planning to be consistent with the existing and future noise environment and promote development standards in which noise-sensitive projects and residences are mitigated from major noise sources. Short-term and long-term noise control measures should be formulated in a manner compatible with community needs and expectations.

Program N1-3.1A: Noise regulations and standards shall be developed or updated in conformance with the findings of the General Plan.

Program N1-3.1AB: The City shall conduct an educational campaign to inform the public of the consequences of noise and the actions each person can take to help reduce noise. The City shall provide, if appropriate, educational material, group presentations, news releases, studies, and reports to raise public awareness of the adverse effects of noise.

Policy N1-3.2: Work to remove non-conforming land uses (mixed usage such as residential uses in commercial or industrial land use designations) which result in noise incompatibility.

Program N1-3.2A: The City shall develop strategies for the orderly implementation of mitigation measures for present noise-impacted areas, such as residential uses adjacent to the industrial uses.

Policy N1-3.3: Employ effective noise mitigation techniques through appropriate provisions in the building code, subdivision procedures, and zoning and noise ordinances.

Program N1-3.3A: The City shall review and, if necessary, revise the City Noise Ordinance to ensure that proper regulations are being enforced to protect City

residents from excessive noise levels from stationary noise sources.

Program N1-3.3B: Noise-related zoning regulations shall be revised to be consistent with the Noise Element.

Program N1-3.3C: When appropriate, the City shall allocate noise impact mitigation costs to the agency or party responsible for the noise incompatibility.

Program N1-3.3D: The City shall use police power to vigorously enforce existing laws relative to noise.

Policy N1-3.4: Urge continued federal and state research into noise problems and recommend additional research programs as problems are identified.

Program N1-3.4A: The City shall apply for the technical, procedural, and funding assistance available at the state and federal level for noise reduction measures.

Policy N1-3.5: Support a continuous effort to evaluate noise levels in the City of El Segundo and to reduce unacceptable noise levels through the planning process.

Program N1-3.5A: The City shall join adjacent jurisdictions (e.g., City of Los Angeles, City of Hawthorne, City of Manhattan Beach) and other agencies involved in noise mitigation in a cooperative effort to lessen adverse impacts and reduce noise incompatibilities across city boundaries.

The Noise Element references interior and exterior noise standards contained in the El Segundo Municipal Code, but these referenced standards are no longer a part of the City's noise regulations. The Noise Element was adopted in 1992, and the El Segundo Municipal Code has undergone numerous amendments since that time. The City's current Municipal Code noise regulations are identified and discussed in the following section.

3.3.3.2 City of El Segundo Municipal Code

The El Segundo Municipal Code establishes a number of regulations for the control of noise and vibration. Title 7, Nuisances and Offenses, Chapter 2, Noise and Vibration, establishes the following standards that are relevant to the Project and the evaluation of its noise and vibration impacts:

Section 7-2-4: Noise Standards. No person shall, at any location within the City, create any noise, nor shall any person allow the creation of any noise within the person's control on public or private property (hereinafter "noise source"), which causes the noise level when measured on any other property

(hereinafter “receptor property”), to exceed the applicable noise standard, except as set forth in subsection C1 of this section.

- A. Residential Property: Five (5 dBA) above the ambient noise level.
- B. Commercial and Industrial Property: Eight (8) dBA above the ambient noise level.
- C. Adjustments:
 - 1. Increases to the noise standards as set forth in subsections A and B of this Section may be permitted in accordance with the following [see **Table 5**]:

Table 5
Section 7-2-4 (C)(1): Noise Standard Adjustments

Permitted Increase (dBA)	Duration of Increase (cumulative minutes per hour)
0	30
5	15
10	5
15	1
20	Less than 1
<i>Source: El Segundo Municipal Code, Section 7-2-4(C)(1).</i>	

- 2. If the receptor property is located on a boundary between two (2) difference noise zones, the lower noise level standard applicable to the quieter zone shall apply.

Section 7-2-6: **Loud, Unusual and Unnecessary Noises Prohibited.** Consistent with other provisions of this Chapter, and in addition thereto, it shall be unlawful for any person to willfully make, produce, suffer or allow to be produced by human voice, machine, animal, or device, or any combination of same, any loud, unusual, or unnecessary noise which disturbs the peace, quiet, and comfort of any neighborhood, or which causes discomfort or annoyance to any reasonable person of normal sensitivity in the area.

Section 7-2-7: **Standards; Criteria.** The standards which shall be considered in determining whether a violation of the provisions of Section 7-2-6 of this Chapter exists shall include, but shall not be limited to, the following criteria:

- A. The frequency of the noise;
- B. The intensity of the noise;
- C. Whether the nature of the noise is usual or unusual;
- D. The ambient noise level;
- E. The proximity of the noise to residential sleeping facilities;

- F. The nature and zoning of the area within which the noise emanates;
- G. The density of the inhabitation of the area within which the noise emanates;
- H. The time of the day or night the noise occurs;
- I. The duration of the noise;
- J. Whether the noise is recurrent, intermittent or constant; and
- K. Whether the noise is produced by a commercial or noncommercial activity.

Section 7-2-8: Specific Prohibitions. The following acts, and the causing thereof, are declared to be in violation of this Chapter if they occur in such a manner as to disturb the peace, quiet and comfort of any reasonable person of normal sensitivity residing in the area; and occur:

- A. Between the Hours of 10:00 P.M. and 7:00 P.M.:
 - 1. Operating, playing or permitting the operation or playing of any radio, television, phonograph, drum, musical instrument, sound amplifier, or similar device which produces, reproduces or amplifies sound.
 - 2. Using or operating any loudspeaker, public address system or similar device.
 - 3. Loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects.
 - 4. Repairing, building, rebuilding, adjusting or testing any motor vehicle.
- B. Between the Hours of 8:00 P.M. and 7:00 P.M.:
 - 1. Refuse Collection Vehicles:
 - a. Collection of refuse with a collection vehicle in a residential area or within five hundred feet (500') thereof;
 - b. Operation or permitting the operation of the compacting mechanism of any motor vehicle which compacts refuse in a residential area or within five hundred feet (500') thereof.
 - 2. Loudspeakers/Public Address Systems: Using or operating for any commercial purpose any loudspeaker, public address system, or similar device on a public right of way or public space.

3. Powered Model: Operating or permitting the operation of powered models.

Section 7-2-9: Vibration. Notwithstanding other sections of this Chapter, a person shall not create, maintain or cause any ground vibration which is perceptible, without the use of instruments, to any reasonable person of normal sensitivity at any point on any affected property.

Section 7-2-10: Exemptions. The following activities shall be exempted from the provisions of this Chapter.

- A. School and Park Facilities: Authorized activities conducted on public school grounds and City park facilities, associated with normal operation of the facilities including, but not limited to, school and public athletic and entertainment events.
- B. Mechanical or Electronic Devices: Any mechanical or electronic device, apparatus or equipment used, related to or connected with emergency machinery, vehicle, work or warning alarm or bell, provided the sounding of any bell or alarm on any building or motor vehicle shall terminate its operation within fifteen (15) minutes of its activation.
- C. Public Speaking or Assemblies: Noncommercial public speaking and public assembly activities conducted on any public space or public right of way without the use of sound amplification equipment.
- D. Construction Noise: Noise sources associated with or vibration created by construction, repair, or remodeling of any real property, provided said activities do not take place between the hours of six o'clock (6:00) P.M. and seven o'clock (7:00) A.M. Monday through Saturday, or at any time on Sunday or a Federal holiday, and provided the noise level created by such activities does not exceed the noise standard of sixty five (65) dBA plus the limits specified in subsection 7-2-4(C) of this Chapter as measured on the receptor residential property line and provided any vibration created does not endanger the public health, welfare and safety.
- E. Real Property Maintenance: Noise sources associated with the maintenance of real property, provided said activities take place between the hours of seven o'clock (7:00) A.M. and eight o'clock (8:00) P.M. on any day except Sunday, or between the hours of nine o'clock (9:00) A.M. and eight o'clock (8:00) P.M. on Sunday.

- F. Activities Preempted by State or Federal Law: Any activity to the extent regulation thereof has been preempted by State or Federal law, including, but not limited to, aircraft, motor vehicles, railroads and other interstate carriers.

Section 7-2-13: Immediate Threats to Health and Welfare.

- A. Order Immediate Halt: The noise control officer may order an immediate halt to any sound which exposes any person to continuous sound levels in excess of those shown in Table A in subsection D of this Section [see **Table 6**], or impulsive sounds in excess of Table B in subsection D of this Section [see **Table 7**]. Within two (2) working days following issuance of such an order, the noise control officer shall apply to the appropriate court for an injunction to replace the order.
- B. Exceptions to Issuance or Order: No order pursuant to subsection A of this Section shall be issued if the only persons exposed to sound levels in excess of those listed in Tables A [see **Table 6**] and B [**Table 7**] of subsection D of this Section are exposed as a result of:
 - 1. Trespass;
 - 2. Invitation upon private property by the person causing or permitting the sound; or
 - 3. Employment by the person or a contractor of the person causing or permitting the sound.
- C. Remedial Action: Any person subject to an order issued by the Noise Control Officer pursuant to this section shall comply with such order until:
 - 1. The sound is brought into a compliance with the order, as determined by the Noise Control Officer; or
 - 2. A judicial order has superseded the Noise Control Officer.
- D. Prohibited Sound Level: The sound levels which pose an immediate threat to health and welfare are:

Table 6
Section 7-2-13 (D): Continuous Sound Levels

Sound Level Limit (dBA)	Duration
90	8 hours
95	4 hours
100	2 hours
105	1 hour
110	30 minutes
<i>Note: Sound levels measured at 50 feet or 15 meters.</i>	
<i>Source: El Segundo Municipal Code, Section 7-2-13(D) Table A.</i>	

Table 7
Section 7-2-13 (D): Impulsive Sound Levels

Sound Level Limit (dBA)	Number of Repetitions Per 24-Hour Period
145	1
135	10
125	100
<i>Note: Sound levels measured at 50 feet or 15 meters.</i>	
<i>Source: El Segundo Municipal Code, Section 7-2-13(D) Table B.</i>	

3.4 Existing Conditions

3.4.1 Plan Area

The Specific Plan area is located in Downtown El Segundo, in the northwest quadrant of the City, which is approximately 20 miles southwest from downtown Los Angeles. Downtown El Segundo is located southwest of the interchange of Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of Imperial Highway.

The Project area is approximately 43.8 acres in size. The Project area is irregular in shape with portions extending to Eucalyptus Drive to the east, El Segundo Boulevard to the south, Concord Street to the west, and Mariposa Avenue to the north. Los Angeles International Airport (LAX) is located approximately 3,000 feet north of the Specific Plan area.

3.4.2 Noise-Sensitive Receptors

Noise-sensitive receptors typically are considered to be residential uses, long-term care facilities, hotels/motels, houses of worship, hospitals, libraries, schools, concert halls, and parks. The Specific Plan area includes primarily a range of neighborhood service commercial uses, such as

retail, restaurants, offices, and banks, all of which would not be considered noise-sensitive. However, there are also some noise-sensitive uses within the Specific Plan area, such as:

- El Segundo United Methodist Church (540 Main Street)
- St. Michael's Episcopal Church and Children's Center (361 Richmond Street)
- Multi-family residential building (350 Richmond Street)
- Residential uses along Richmond Street, near Grand Avenue
- Old Town Music Hall (140 Richmond Street)

The land uses surrounding the Specific Plan area are generally residential in nature but contain a variety of other uses, as well. Noise-sensitive uses that are adjacent or in close proximity to the Specific Plan area include the following:

- El Segundo Public Library (111 West Mariposa Avenue) – directly north of the Specific Plan area, across Mariposa Avenue.
- Richmond Street Elementary School (615 Richmond Street) – approximately 275 feet northeast of the Specific Plan area.
- Library Park – directly north of the Specific Plan area, across Mariposa Avenue.
- El Segundo High School (640 Main Street) – directly north of the Specific Plan area, across Mariposa Avenue.
- El Segundo Performing Arts Center (640 Main Street) – approximately 350 feet north of the Specific Plan area.
- El Segundo Pre-School (301 West Grand Avenue) – directly west of the Specific Plan area, across Concord Street.
- Concord Hotel (221 Concord Street) – approximately 70 feet west of the Specific Plan area.
- El Segundo Christian Church (223 West Franklin Avenue) – directly west of the Specific Plan area.
- Residential land uses located along and west of Richmond Street – the nearest residential uses are directly north of the Specific Plan area, across Holly Avenue.
- Residential land uses located along and east of Standard Street – the nearest residential uses are directly east of the Specific Plan area, across Standard Street.
- Residential land uses located along and west of Concord Street – the nearest residential uses are directly west of the Specific Plan area, across Concord Street.

A map identifying the locations of sensitive receptors is included in the appendix to this report.

The Project would allow for the construction of up to 300 residential units, which could also be noise-sensitive receptors to future development under the Project.

3.4.3 Existing Ambient Noise Conditions

The City's General Plan identifies LAX aircraft noise, traffic noise, railway noise, and industrial noise as the major noise sources affecting the City and its inhabitants. The most recent quarterly noise reports released by Los Angeles World Airports (LAWA) show that CNEL values near the

Specific Plan area range between 62 and 64 dB CNEL.¹⁹ Given the size of the Specific Plan area and its orientation relative to LAX's noise contours and noise monitoring locations, it is reasonable to assume that LAX-related noise levels in the Specific Plan area are approximately 60 dBA CNEL. The City's General Plan shows that noise levels from all sources in the Specific Plan area, not just LAX, range between 65 and 70 dBA CNEL.

On Thursday, September 7, 2023, noise measurements were obtained at multiple locations within the Specific Plan area to aid in the characterization of daytime ambient noise conditions within the Specific Plan area. The measured noise levels are shown in **Table 8**, below. Descriptions of noise sources are also included for each noise measurement. The measured noise levels are consistent with the determination that ambient noise levels in the Specific Plan area range between 65 and 70 dBA CNEL. A map identifying the locations of noise measurements is included in the appendix to this report.

Table 8
Existing Noise Levels

Noise Measurement Location	Noise Sources / Notes	Sound Level (dBA L _{eq})
1. Intersection of Main Street and Mariposa Avenue	Traffic along Main Street and Mariposa Avenue. Aircraft also contributed to noise levels.	69.2
2. Intersection of Main Street and Holly Avenue	Traffic along Main Street and Holly Avenue. Aircraft also contributed to noise levels. Amplified music from surrounding commercial/retail uses was audible at times but did not contribute substantially to noise levels.	65.7
3. Intersection of Main Street and Grand Avenue	Traffic along Main Street and Grand Avenue. Aircraft noise was not substantially audible over traffic noises.	67.7
4. Intersection of Main Street and El Segundo Boulevard	Traffic along Main Street and El Segundo Boulevard. Industrial noises from the nearby refinery were clearly audible at all times.	68.0
5. Intersection of Grand Avenue and Richmond Street	Traffic along Grand Avenue and Richmond Street. Some noise from outdoor dining patrons.	62.9
<i>Source: NTEC, 2023.</i>		

¹⁹ Los Angeles World Airports Quarterly Noise Reports. <https://www.lawa.org/lawa-environment/noise-management/lawa-noise-management-lax/california-state-airport-noise-standards-quarterly-reports-and-contour-maps>. Accessed September 5, 2023.

4. Project Impacts

4.1 Thresholds of Significance

The following thresholds are adopted to aid in the determination of the Project's noise impacts:

4.1.1 State CEQA Guidelines: Appendix G

In accordance with Appendix G of the CEQA Guidelines, the Project would have a significant impact related to noise if the Project would 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?*
- b) *Generation of excessive groundborne vibration or groundborne noise levels?*
- 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?*

4.1.2 Construction Noise Thresholds

Consistent with CEQA and Appendix G of the CEQA Guidelines, construction of the Project would have a significant noise impact if:

- Project construction would expose noise-sensitive receptors to noise levels in excess of the standards established in the El Segundo Municipal Code Section 7-2-4 and Section 7-2-10(D).
- Project construction would expose any person to noise levels in excess of the standards established in the El Segundo Municipal Code Section 7-2-13.

El Segundo Municipal Code Section 7-2-10(D) establishes a noise standard of 65 dBA plus the limits specified in Section 7-2-4 for construction activities that occur between 7:00 A.M. and 6:00 P.M. Monday through Saturday (except on Federal holidays). **Table 9** shows the construction noise limits established by this regulation.

Table 9
Section 7-2-4 and Section 7-2-10(D) Construction
Noise Limits

Permitted Construction Noise Level (dBA)	Minutes Per Hour
Up to 65	60
65 – 70	30
70 – 75	15
75 – 80	5

80 – 85	1
Above 85	Less than 1
<i>Source: Noise limits and allowable exceedances derived from the 65 dBA noise limit established by El Segundo Municipal Code Section 7-2-10(D) and the increases permitted under Section 7-2-4.</i>	

Construction occurring outside these hours or on Sunday or Federal holidays would be subject to the normal Section 7-2-4 noise standards, which are a 5 dBA over ambient increase plus the adjustments shown in **Table 5**. From a CEQA standpoint, this regulatory framework adequately assesses the potential for construction noise levels to significantly impact noise-sensitive receptors within or surrounding the Specific Plan area. As discussed earlier, existing ambient noise levels within the Specific Plan area are in excess of 65 dBA CNEL. Given these existing conditions, daytime construction noise levels less than 65 dBA L_{eq} would not constitute a substantial temporary increase in noise levels. Noise levels temporarily exceeding 65 dBA L_{eq} within the permitted increases outlined by El Segundo Municipal Code Section 7-2-4 (shown in **Table 9**) also would not constitute a substantial temporary increase in noise levels. For example, noise levels up to 5 dBA greater than the base 65 dBA L_{eq} limit would only be permitted to occur up to 30 minutes per hour. Construction activities occurring outside the hours established by Section 7-2-10(D) (i.e., nighttime construction or construction occurring on Sunday or federal holidays) would be subject to the more stringent Section 7-2-4 noise standards, which, as noted, are a 5 dBA over ambient increase with limited adjustments.

El Segundo Municipal Code Section 7-2-13 establishes continuous and impulsive noise limits applicable to all receptors. These limits are shown above in **Table 6** and **Table 7**. These noise limits would ensure that the Project's construction noise levels do not reach levels capable of posing a threat to health or welfare (i.e., noise levels capable of causing hearing loss).

The City's General Plan does not contain quantitative noise standards that are applicable to the Project's construction activities. The City has not adopted other construction-related noise thresholds of significance for CEQA consideration.

4.1.3 Operational Noise Thresholds

Consistent with CEQA and Appendix G of the CEQA Guidelines, implementation of the Project would have a significant noise impact if:

- Project operations would generate noise levels in excess of the standards established in the El Segundo Municipal Code Section 7-2-4.
- Project operations would conflict with the specific prohibitions established in the El Segundo Municipal Code Section 7-2-8.
- Project operations would result in a 3 dBA CNEL or greater increase in ambient noise levels.

El Segundo Municipal Code Section 7-2-4 establishes a 5 dBA above ambient noise level standard for residential property and an 8 dBA above ambient noise level standard for commercial and industrial property. Increases beyond these standards are permitted on a limited basis consistent with the “adjustments” established by Section 7-2-4(C)(1).

El Segundo Municipal Code Section 7-2-8 includes prohibitions for specific sources such as amplified sources, loading/unloading activities, refuse collection vehicles, etc. Section 7-2-8 does not establish quantitative noise standards for sources, but it establishes allowable hours of use and other operational conditions.

This analysis conservatively considers any 3 dBA CNEL increase in noise levels (a barely perceptible difference) to constitute a potentially significant impact.

The City’s General Plan does not contain quantitative noise standards that are applicable to the Project’s operations. The City has not adopted other noise thresholds of significance for CEQA consideration.

4.1.4 Groundborne Vibration Threshold

Consistent with CEQA and Appendix G of the CEQA Guidelines, construction and implementation of the Project would have a significant groundborne vibration impact if:

- Project construction would generate groundborne vibration levels that endanger the public health, welfare and safety, as established by El Segundo Municipal Code Section 7-2-10(D).
- Project operations would result in groundborne vibration that is perceptible without instruments, as established by El Segundo Municipal Code Section 7-2-9.

El Segundo Municipal Code Section 7-2-10(D) prohibits construction-related groundborne vibration levels that endanger the public health, welfare, and safety, but it does not provide quantitative thresholds. Therefore, the criteria identified by Caltrans in its 2020 Transportation and Construction Guidance Manual are utilized to assist in the assessment Project’s groundborne vibration impacts and their potential to exceed the Section 7-2-10(D) standards. These criteria are shown and discussed earlier in **Table 3**.

El Segundo Municipal Code Section 7-2-9 prohibits groundborne vibration that is perceptible without instruments. Similarly, the criteria identified by Caltrans in its 2020 Transportation and Construction Guidance Manual are utilized to assist in the assessment of the Project’s groundborne vibration impacts and their potential to result in perceptible (by humans) vibration. As shown and discussed earlier in **Table 4**, Caltrans identifies a 0.04 in/sec PPV “barely perceptible” threshold for transient vibration sources and a 0.01 in/sec PPV “barely perceptible” threshold for sources that are continuous, frequent, or intermittent.

5. Analysis of Project Impacts

5.1 Threshold a):

Would the project result in 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?

5.1.1 Construction Noise Impact

5.1.1.1 Land Use Designation and Zoning

By amending the land use designation and zoning on eight parcels within the Specific Plan area, the Downtown Specific Plan Update would facilitate construction of projects within the Specific Plan area through 2040. These projects could occur on any property within the Specific Plan area and affect existing or future land uses located within or surrounding the Specific Plan area, including noise-sensitive receptors such as residential and school land uses. Thus, this analysis broadly addresses the potential for Project implementation to result in temporary construction noise impacts.

Construction of projects facilitated by the Downtown Specific Plan Update would generate noise throughout the implementation period through 2040. This does not mean that all facilitated projects would be under construction simultaneously until 2040; the City conservatively estimates that a maximum 10 percent of buildout allowed under the Project could be under construction in any given year, but there are also likely to be periods in which no construction occurs. The exact location and types of development are not known, but the general location and types of development can be reasonably anticipated. For example, projects would likely be concentrated along Main Street and would consist mainly of low-rise or mid-rise buildings, in accordance with existing and proposed site-development standards for the Project's districts. Construction of these projects would generate noise levels that are typical of demolition, site preparation, grading, building construction, paving, and finishing activities for low-rise and mid-rise buildings. The magnitude of potential construction noise impacts on noise-sensitive receptors would be dependent on project-specific factors that are not known at this time (i.e., proximity to noise-sensitive receptors, intervening barriers/structures, construction intensity, etc.), but given the anticipated building types and construction activities, as well as the City's noise regulations, it is nevertheless possible to estimate noise levels – and assess the significance of noise levels – that would be associated with construction of projects facilitated by the Downtown Specific Plan Update. **Table 10** presents noise levels associated with typical construction equipment that could be utilized for the construction of future projects facilitated by the Downtown Specific Plan Update.

Table 10
Typical Construction Equipment Noise Levels

Equipment	Typical Construction Phases	Predicted Noise Levels (dBA L _{eq}) at Distance				
		50 feet	100 feet	150 feet	200 feet	250 feet
Auger Drill Rig	G, BC	77.4	71.3	67.8	65.3	63.4
Backhoe	D, SP, G	73.6	67.6	64.0	61.5	59.6
Compactor	G	76.2	70.2	66.7	64.2	62.3
Compressor (air)	BC, F	73.7	67.7	64.1	61.6	59.7
Concrete Mixer Truck	BC	74.8	68.8	65.3	62.8	60.8
Concrete Pump Truck	BC	74.4	68.4	64.9	62.4	60.4
Crane	BC	72.6	66.6	63.0	60.6	58.6
Dozer	D, SP, G	77.7	71.7	68.1	65.6	63.7
Dump Truck	D, SP, G	72.5	66.5	62.9	60.4	58.5
Excavator	D, SP, G	76.7	70.7	67.2	64.7	62.8
Front End Loader	D, SP, G, BC, P	75.1	69.1	65.6	63.1	61.2
Generator	All Phases	77.6	71.6	68.1	65.6	63.6
Grader	SP, G	81.0	75.0	71.5	69.0	67.0
Jackhammer	D	81.9	75.9	72.4	69.9	67.9
Paver	P	74.2	68.2	64.7	62.2	60.2
Pneumatic Tools	All Phases	82.2	76.1	72.6	70.1	68.2
Roller	G, P	73.0	67.0	63.5	61.0	59.0
Scraper	SP, G	79.6	73.6	70.1	67.6	65.6
Welder	BC	70.0	64.0	60.5	58.0	56.0
<p><i>Notes:</i></p> <p><i>D = Demolition</i> <i>SP = Site Preparation</i> <i>G = Grading</i> <i>BC = Building Construction</i> <i>F = Finishing</i> <i>P = Paving</i></p> <p><i>The noise levels shown do not account for ground attenuation factors.</i></p> <p><i>Source: Noise levels derived from the Federal Highway Administration (FHWA) Roadway Construction Noise Model, version 1.1 (RCNM 1.1).</i></p>						

Actual construction noise levels would likely be highly variable, depending on a wide range of project-specific factors. For example, some projects could involve extensive demolition and grading that would require intensive use of several loud, heavy-duty earthmoving vehicles such as dozers, excavators, and graders. Other projects could be renovation projects that would not

involve demolition or grading vehicles at all. Some projects could be located directly adjacent to sensitive receptors, and other projects could be hundreds of feet away from sensitive receptors. For all projects, construction noise levels at surrounding noise-sensitive receptors would fluctuate depending on equipment distances from these receptors. For example, noise levels would be greater when equipment operates in proximity of sensitive receptors and lower when equipment is positioned farther away.

Regardless of the type and location of future projects, and irrespective of the other factors discussed above, the City would review individual development proposals for compliance with applicable noise control requirements. As discussed earlier, El Segundo Municipal Code Section 7-2-10(D) establishes that construction activities occurring between 7:00 A.M. and 6:00 P.M. Monday through Saturday (except federal holidays) do not exceed a noise standard of 65 dBA, plus the permitted increases shown in **Table 9**. Construction activities occurring outside these hours would be subject to the more stringent noise standards imposed by Section 7-2-4, which include a 5 dBA over ambient threshold for residential land uses. Further, Section 7-2-13 establishes limits to ensure that noise levels do not reach levels capable of posing a threat to health or welfare. Compliance with these requirements, as well as the application of project-specific mitigation measures for future projects in the planning area as necessary (e.g., temporary noise barriers for construction near sensitive residential receptors, use of quieter equipment, etc.), would ensure that future development does not expose noise-sensitive receptors to substantial noise increases from construction. The reasoning is as follows:

First, as discussed earlier, existing ambient noise levels within the Specific Plan area are in excess of 65 dBA CNEL. The 65 dBA noise limit established by El Segundo Municipal Code Section 7-2-10(D) aligns well with these existing conditions: by prohibiting substantial exceedances of the 65 dBA noise limit, Section 7-2-10(D) would also prohibit substantial exceedances of existing noise conditions at receptors during the regulated hours.

Second, construction occurring outside the regulated hours, while unlikely, would be subject to the more stringent 5 dBA over ambient standard established by Section 7-2-4, which would also prohibit substantial exceedances of existing noise conditions at receptors.

Third, notwithstanding the Section 7-2-10(D) and Section 7-2-4 noise standards, Section 7-2-13 would also ensure that construction noise levels do not reach levels associated with noise-induced hearing loss.

Thus, the City's noises standards and future projects' compliance therewith would ensure that noise-sensitive receptors are protected against substantial noise increases from construction activities. As such, this impact would be **less than significant**.

5.1.1.2 Transportation and Mobility Enhancements

The Project also proposes the following transportation and mobility enhancements:

- Pedestrian crossing enhancements at 12 locations
- Area-wide sidewalk curb ramp enhancements
- Bicycle mobility enhancements on two roadway segments

- Area-wide bicycle accommodation and wayfinding enhancements
- Bus stop enhancements at six existing bus stops
- Signal operation enhancements on two roadway segments
- Area-wide intersection control improvements (signage and striping)
- In-road bollard receptacles for temporary street closures at two locations
- Area-wide on-street parking striping enhancements
- Area-wide off-street parking optimization enhancements

Limited details are available pertaining to the construction requirements of these proposed enhancements, but, as discussed above, construction of the enhancements would be required to comply with applicable noise control requirements, namely the noise limits established by El Segundo Municipal Code Section 7-2-10(D), Section 7-2-4, and Section 7-2-13. And as explained above, these noise standards and the enhancements' compliance therewith would ensure that noise-sensitive receptors are protected against substantial noise increases from related construction activities. As a result, impacts related to construction of these proposed transportation and mobility enhancements would also be **less than significant**.

5.1.2 Operations Noise Impact

5.1.2.1 Stationary Noise Sources

Operations of the proposed retail, restaurant, office, medical office, and residential land uses could involve stationary sources such as (but not limited to):

- Landscaping/maintenance equipment
- HVAC systems
- Loading docks
- Trash compactors
- Parking lots
- Outdoor dining areas
- Outdoor residential open space/amenity areas (e.g., balconies, pool decks, etc.)

The exact location and types of development that would be facilitated by the Downtown Specific Plan Update are not known. Like construction, the magnitude of potential stationary source noise impacts on noise-sensitive receptors would be dependent on project-specific factors that are not known at this time (e.g., proximity to noise-sensitive receptors, the size or number of stationary sources, etc.). Despite this, many factors support that the Project's future stationary noise sources would not result in substantial noise increases at noise-sensitive receptors. First, these noise sources are already present within the Specific Plan area, which contains existing

commercial, retail, and residential uses. The Project would not introduce substantially different uses and accompanying stationary noise sources (e.g., industrial uses, etc.) to the Specific Plan area. Second, the types of commercial, retail, and residential uses that would be facilitated by the Downtown Specific Plan Update and their common stationary noise sources are not associated with substantial noise levels. For example, sources such as landscaping/maintenance equipment, non-industrial loading docks, and trash compactors generate noise on an intermittent basis and have a limited effect on daily ambient noise conditions. Sources such as HVAC systems, parking lots, and outdoor gathering areas are more continuous but generate modest noise levels that are consistent with existing conditions and ambient noise levels within the Specific Plan area. Third, future projects and noise from their stationary sources would be subject to review for compliance with the City's applicable noise control requirements. During this time, the City would evaluate conditions specific to the future projects, determine if the stationary noise sources being proposed could result in exceedances of the City's noise standards or other significant effects, and, if necessary, identify appropriate mitigation measures to reduce the severity of the impact. Notably, noise sources would be evaluated for compliance with the City's noise standards, specifically those established by El Segundo Municipal Code Section 7-2-4 and Section 7-2-8. For example, Section 7-2-4 would prohibit future projects from exceeding ambient noise levels at noise-sensitive residential properties by more than 5 dBA, with limited adjustments. Thus, existing ambient noise conditions at noise-sensitive residential properties would be protected against substantial noise increases. Section 7-2-8 would additionally prohibit certain loud activities from occurring during noise-sensitive evening and early morning hours. Given these considerations and the City's existing noise regulations, significant noise impacts from stationary noise sources would not occur under implementation of the Project, and this impact would be **less than significant**.

5.1.2.2 Mobile Noise Sources (Traffic)

The Downtown Specific Plan Update does not propose or approve of any specific development project that would generate traffic and therefore traffic-related noise, but by amending the land use designation and zoning on eight parcels within the Specific Plan area, the Downtown Specific Plan Update would facilitate construction of projects within the Specific Plan area through 2040. The exact location and types of projects that would be facilitated by the Project are not known, and the magnitude of potential traffic-related noise impacts would be dependent on project-specific factors that are also not known at this time (e.g., proximity to noise-sensitive receptors, land use type and size, trip generation rates, etc.). However, based on the Project's estimated trip generation and distribution, it is not anticipated that the Downtown Specific Plan Update would result in substantial noise increases from traffic generated by future projects implemented under the Specific Plan. In their Local Transportation Assessment of the Project, Fehr and Peers has estimated traffic that would result from full buildout of the Project's allowable increases in retail, restaurant, office, medical office, and residential land uses within the Specific Plan area.²⁰ Noise levels associated with this traffic were estimated using the FHWA's Traffic Noise Model version 2.5 (TNM 2.5). This noise prediction software uses traffic volumes, vehicle mix, average speeds,

²⁰ Fehr and Peers, Local Transportation Assessment for the El Segundo Downtown Specific Plan Update, April 2023.

roadway geometry, and other inputs to estimate traffic-related noise levels along roadway segments. The Project's estimated peak hour traffic-related noise levels along roadways within the Specific Plan area are shown below in **Table 11**. As shown, the Project's traffic-related noise levels on surrounding roadways (i.e., noise that would be associated with the Project's vehicle trips only) would be no greater than 57 dBA L_{eq} during the busiest peak hours. Given that existing noise levels within the Specific Plan area exceed 65 dBA CNEL, this demonstrates that noise increases resultant from Project-related traffic would be nominal – fractions of a decibel and below the 3 dBA CNEL threshold of significance that represents a barely perceptible change (for example, 57 dBA + 65 dBA = 65.6 dBA). As a result, the Project's traffic-related noise impact would be **less than significant**.

Table 11
Traffic Noise Levels from Full Project Buildout

Roadway Segment	Traffic Noise Level (dBA L_{eq})	
	AM Peak Hour	PM Peak Hour
Main Street, north of Mariposa Avenue	55.5	57.0
Main Street, south of Mariposa Avenue	55.4	56.7
Main Street, north of Grand Avenue	55.0	56.2
Main Street, south of Grand Avenue	53.2	54.7
Main Street, north of El Segundo Boulevard	51.8	53.6
Mariposa Avenue, west of Main Street	45.1	48.1
Mariposa Avenue, east of Main Street	43.8	45.1
Grand Avenue, west of Main Street	54.8	56.2
Grand Avenue, east of Main Street	54.1	55.8
El Segundo Boulevard, east of Main Street	52.1	53.6

Source: Modeling by NTEC, 2023. Traffic data provided by Fehr and Peers, 2023.

5.2 Threshold b):

Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

5.2.1 Construction-related Groundborne Vibration

Construction of projects and improvements facilitated by the Downtown Specific Plan Update would generate groundborne vibration from the operations of construction equipment. **Table 12** presents groundborne vibration levels associated with typical construction equipment that could be utilized for the construction of future projects facilitated by the Downtown Specific Plan Update.

Table 12
Typical Construction Equipment Groundborne Vibration Levels

Equipment	Groundborne Vibration Level (in/sec PPV) at Distance				
	25 feet	50 feet	75 feet	100 feet	125 feet
Vibratory Roller	0.210	0.098	0.063	0.046	0.036
Large Bulldozer	0.089	0.042	0.027	0.019	0.015
Small Bulldozer	0.003	0.001	0.001	0.001	0.001
Auger Drill	0.089	0.042	0.027	0.019	0.015
Loaded Truck	0.076	0.035	0.023	0.017	0.013
Jackhammer	0.035	0.016	0.010	0.008	0.006
Impact Pile Driver (Upper Range)	1.518	0.708	0.453	0.330	0.258
Impact Pile Driver (Typical)	0.644	0.300	0.192	0.140	0.110
Vibratory Pile Driver (Upper Range)	0.734	0.342	0.219	0.160	0.125
Vibratory Pile Driver (Typical)	0.170	0.079	0.051	0.037	0.029

Source: Groundborne vibration levels derived from reference groundborne vibration levels provided by Caltrans in its 2020 Transportation and Construction Vibration Guidance Manual and the FTA in its 2018 Transit Noise and Vibration Impact Assessment Manual.

As shown, certain construction equipment is capable of generating groundborne vibration levels that exceed Caltrans criteria for building damage or severe human annoyance (see **Table 3** and **Table 4**, respectively). Actual groundborne vibration levels generated by construction activities would likely be highly variable, depending on a wide range of project-specific factors. For example, some projects would require intensive use of bulldozers or other grading equipment that is the vibrational equivalent of bulldozers. Other projects could be renovation projects that would not require this type of grading equipment. Some projects could be located directly adjacent to structures that are more sensitive to groundborne vibration, and other projects could be over 100 feet from vibration-sensitive structures.

The City would review individual development proposals for compliance with El Segundo Municipal Code Section 7-2-10(D), which prohibits construction-related groundborne vibration levels that endanger the public health, welfare, and safety. Compliance with this regulatory requirement, as well as the application of project-specific mitigation measures for future projects in the Specific Plan area as necessary (e.g., utilizing alternative construction equipment/techniques such as auger drilling instead of pile driving), would ensure that future projects do not expose buildings to potentially damaging levels of groundborne vibration or levels capable of causing severe human annoyance. In other words, the City's groundborne vibration standards and future projects' compliance therewith would ensure that buildings and people are protected against substantial groundborne vibration levels from construction activities. As a result, this impact would be **less than significant**.

5.2.2 Operations-related Groundborne Vibration

The Project does not propose or allow for the implementation of land uses or improvements that are associated with significant stationary sources of groundborne vibration, such as heavy equipment or industrial operations. Operations of the retail, restaurant, office, medical office, and residential uses would not contain such vibration sources. Notwithstanding, El Segundo Municipal Code Section 7-2-9 prohibits the generation of groundborne vibration that is perceptible without instruments, which would ensure that future projects do not expose buildings to potentially damaging levels of groundborne vibration or levels capable of causing human annoyance. As a result, this impact would be **less than significant**.

5.3 Threshold 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?

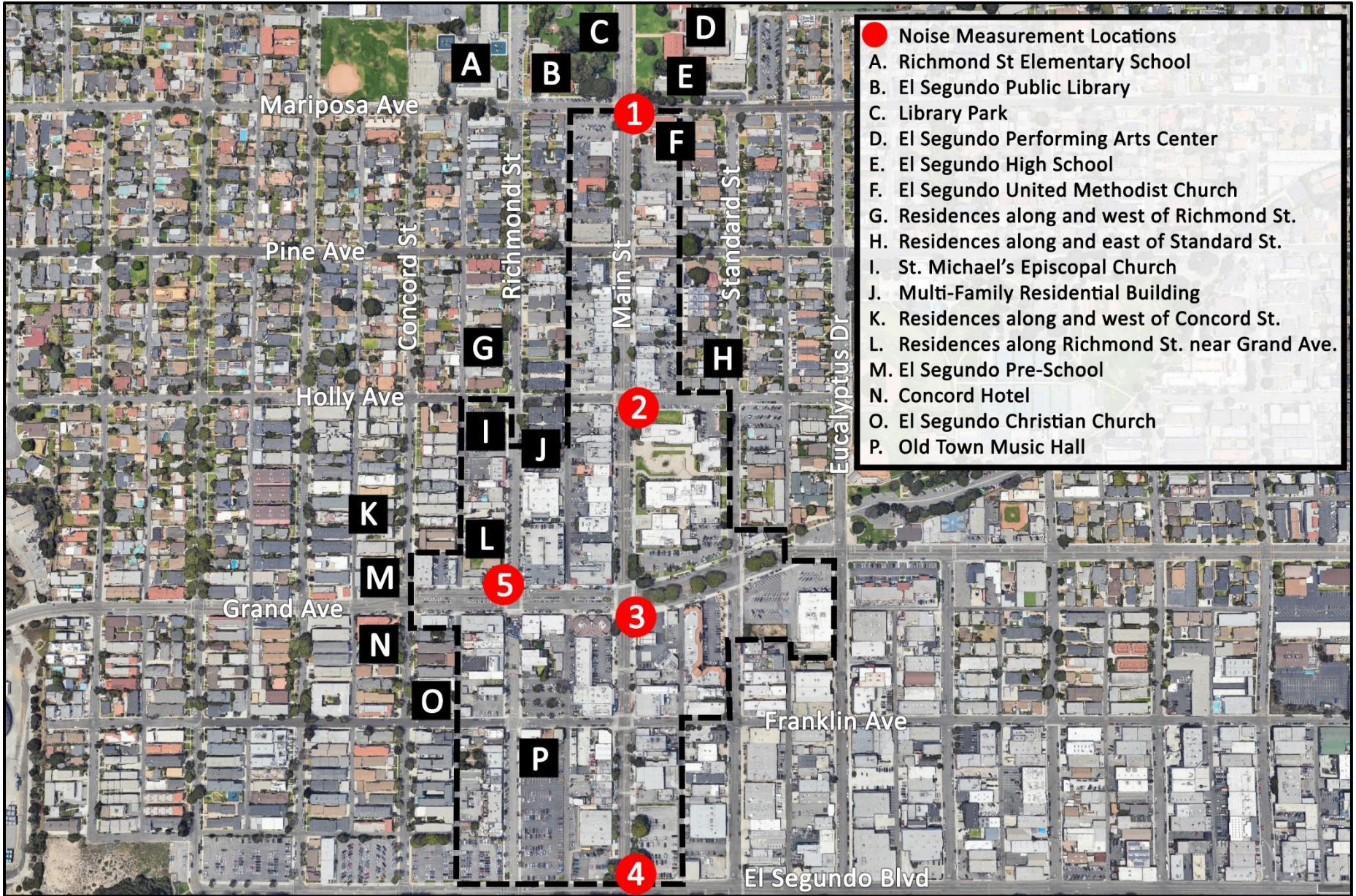
The Specific Plan area is located less than 3,000 feet south of LAX, but only a small portion of the Specific Plan area is located within the LAX “Airport Influence Area” (a few parcels south of Mariposa Avenue along Main Street)²¹, and the Specific Plan area is located outside the airport’s 65 dBA CNEL noise contours.²² State planning standards consider all land uses with noise levels from airport operations less than 65 dBA CNEL to be compatible with aircraft operations. Therefore, the Project would not expose people or land uses to incompatible noise levels from aircraft arriving at or departing from LAX, and this impact would be **less than significant**.

²¹ Source: <https://data.lacounty.gov/datasets/lacounty::airport-influence-area-1/explore?location=33.922920%2C-118.415184%2C16.00>. Accessed September 7, 2023.

²² Los Angeles World Airports Quarterly Noise Reports. <https://www.lawa.org/lawa-environment/noise-management/lawa-noise-management-lax/california-state-airport-noise-standards-quarterly-reports-and-contour-maps>. Accessed September 5, 2023.

Noise Appendix

El Segundo Downtown Specific Plan Update Project



- Noise Measurement Locations
- A. Richmond St Elementary School
- B. El Segundo Public Library
- C. Library Park
- D. El Segundo Performing Arts Center
- E. El Segundo High School
- F. El Segundo United Methodist Church
- G. Residences along and west of Richmond St.
- H. Residences along and east of Standard St.
- I. St. Michael's Episcopal Church
- J. Multi-Family Residential Building
- K. Residences along and west of Concord St.
- L. Residences along Richmond St. near Grand Ave.
- M. El Segundo Pre-School
- N. Concord Hotel
- O. El Segundo Christian Church
- P. Old Town Music Hall

NOISE MEASUREMENT AND SENSITIVE RECEPTOR LOCATION MAP
El Segundo Downtown Specific Plan Project
 Imagery via Google

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 9/5/2023

Case Description: Downtown Specific Plan Construction Equipment

---- Receptor #1 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
50ft Example	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Auger Drill Rig	No	20		84.4	50	0
Backhoe	No	40		77.6	50	0
Compactor (ground)	No	20		83.2	50	0
Compressor (air)	No	40		77.7	50	0
Concrete Mixer Truck	No	40		78.8	50	0
Concrete Pump Truck	No	20		81.4	50	0
Crane	No	16		80.6	50	0
Dozer	No	40		81.7	50	0
Dump Truck	No	40		76.5	50	0
Excavator	No	40		80.7	50	0
Front End Loader	No	40		79.1	50	0
Generator	No	50		80.6	50	0
Grader	No	40	85		50	0
Jackhammer	Yes	20		88.9	50	0
Paver	No	50		77.2	50	0
Pneumatic Tools	No	50		85.2	50	0
Roller	No	20		80	50	0
Scraper	No	40		83.6	50	0
Welder / Torch	No	40		74	50	0

Results

Equipment	Calculated (dBA)			Noise Limits (dBA)			
	*Lmax	Leq	Day	Leq	Evening		Night
			Lmax		Lmax	Leq	
Auger Drill Rig	84.4	77.4	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	83.2	76.2	N/A	N/A	N/A	N/A	N/A
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	78.8	74.8	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck	81.4	74.4	N/A	N/A	N/A	N/A	N/A
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A
Dump Truck	76.5	72.5	N/A	N/A	N/A	N/A	N/A

Excavator	80.7	76.7	N/A	N/A	N/A	N/A	N/A
Front End Loader	79.1	75.1	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A
Grader	85	81	N/A	N/A	N/A	N/A	N/A
Jackhammer	88.9	81.9	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	85.2	82.2	N/A	N/A	N/A	N/A	N/A
Roller	80	73	N/A	N/A	N/A	N/A	N/A
Scraper	83.6	79.6	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74	70	N/A	N/A	N/A	N/A	N/A
Total	88.9	90.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #2 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
100ft Example	Residential	1	1	1

		Equipment				
		Impact	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Description	Device	Usage(%)	(dBA)	(dBA)	(feet)	(dBA)
Auger Drill Rig	No	20		84.4	100	0
Backhoe	No	40		77.6	100	0
Compactor (ground)	No	20		83.2	100	0
Compressor (air)	No	40		77.7	100	0
Concrete Mixer Truck	No	40		78.8	100	0
Concrete Pump Truck	No	20		81.4	100	0
Crane	No	16		80.6	100	0
Dozer	No	40		81.7	100	0
Dump Truck	No	40		76.5	100	0
Excavator	No	40		80.7	100	0
Front End Loader	No	40		79.1	100	0
Generator	No	50		80.6	100	0
Grader	No	40	85		100	0
Jackhammer	Yes	20		88.9	100	0
Paver	No	50		77.2	100	0
Pneumatic Tools	No	50		85.2	100	0
Roller	No	20		80	100	0
Scraper	No	40		83.6	100	0
Welder / Torch	No	40		74	100	0

Results

		Calculated (dBA)		Noise Limits (dBA)			
				Day	Evening	Night	
Equipment	*Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Auger Drill Rig	78.3	71.3	N/A	N/A	N/A	N/A	N/A

Backhoe	71.5	67.6	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	77.2	70.2	N/A	N/A	N/A	N/A	N/A
Compressor (air)	71.6	67.7	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	72.8	68.8	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck	75.4	68.4	N/A	N/A	N/A	N/A	N/A
Crane	74.5	66.6	N/A	N/A	N/A	N/A	N/A
Dozer	75.6	71.7	N/A	N/A	N/A	N/A	N/A
Dump Truck	70.4	66.5	N/A	N/A	N/A	N/A	N/A
Excavator	74.7	70.7	N/A	N/A	N/A	N/A	N/A
Front End Loader	73.1	69.1	N/A	N/A	N/A	N/A	N/A
Generator	74.6	71.6	N/A	N/A	N/A	N/A	N/A
Grader	79	75	N/A	N/A	N/A	N/A	N/A
Jackhammer	82.9	75.9	N/A	N/A	N/A	N/A	N/A
Paver	71.2	68.2	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	79.2	76.1	N/A	N/A	N/A	N/A	N/A
Roller	74	67	N/A	N/A	N/A	N/A	N/A
Scraper	77.6	73.6	N/A	N/A	N/A	N/A	N/A
Welder / Torch	68	64	N/A	N/A	N/A	N/A	N/A
Total	82.9	84.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #3 ----

Description	Land Use	Baselines (dBA)			Equipment					
		Daytime	Evening	Night	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
150ft Example	Residential	1	1	1						
							85			
Auger Drill Rig		No	20				84.4	150	0	
Backhoe		No	40				77.6	150	0	
Compactor (ground)		No	20				83.2	150	0	
Compressor (air)		No	40				77.7	150	0	
Concrete Mixer Truck		No	40				78.8	150	0	
Concrete Pump Truck		No	20				81.4	150	0	
Crane		No	16				80.6	150	0	
Dozer		No	40				81.7	150	0	
Dump Truck		No	40				76.5	150	0	
Excavator		No	40				80.7	150	0	
Front End Loader		No	40				79.1	150	0	
Generator		No	50				80.6	150	0	
Grader		No	40			85		150	0	
Jackhammer		Yes	20				88.9	150	0	
Paver		No	50				77.2	150	0	
Pneumatic Tools		No	50				85.2	150	0	
Roller		No	20				80	150	0	

Scraper	No	40	83.6	150	0
Welder / Torch	No	40	74	150	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day	Evening		Night	
			Lmax	Leq	Lmax	Leq	Lmax
Auger Drill Rig	74.8	67.8	N/A	N/A	N/A	N/A	N/A
Backhoe	68	64	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	73.7	66.7	N/A	N/A	N/A	N/A	N/A
Compressor (air)	68.1	64.1	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	69.3	65.3	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck	71.9	64.9	N/A	N/A	N/A	N/A	N/A
Crane	71	63	N/A	N/A	N/A	N/A	N/A
Dozer	72.1	68.1	N/A	N/A	N/A	N/A	N/A
Dump Truck	66.9	62.9	N/A	N/A	N/A	N/A	N/A
Excavator	71.2	67.2	N/A	N/A	N/A	N/A	N/A
Front End Loader	69.6	65.6	N/A	N/A	N/A	N/A	N/A
Generator	71.1	68.1	N/A	N/A	N/A	N/A	N/A
Grader	75.5	71.5	N/A	N/A	N/A	N/A	N/A
Jackhammer	79.3	72.4	N/A	N/A	N/A	N/A	N/A
Paver	67.7	64.7	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	75.6	72.6	N/A	N/A	N/A	N/A	N/A
Roller	70.5	63.5	N/A	N/A	N/A	N/A	N/A
Scraper	74	70.1	N/A	N/A	N/A	N/A	N/A
Welder / Torch	64.5	60.5	N/A	N/A	N/A	N/A	N/A
Total	79.3	80.6	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #4 ----

Description	Land Use	Baselines (dBA)		
		Daytime	Evening	Night
200ft Example	Residential	1	1	1

Description	Impact Device	Usage(%)	Equipment			
			Spec	Actual	Receptor	Estimated
			Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Auger Drill Rig	No	20		84.4	200	0
Backhoe	No	40		77.6	200	0
Compactor (ground)	No	20		83.2	200	0
Compressor (air)	No	40		77.7	200	0
Concrete Mixer Truck	No	40		78.8	200	0
Concrete Pump Truck	No	20		81.4	200	0
Crane	No	16		80.6	200	0
Dozer	No	40		81.7	200	0
Dump Truck	No	40		76.5	200	0

Excavator	No	40		80.7	200	0
Front End Loader	No	40		79.1	200	0
Generator	No	50		80.6	200	0
Grader	No	40	85		200	0
Jackhammer	Yes	20		88.9	200	0
Paver	No	50		77.2	200	0
Pneumatic Tools	No	50		85.2	200	0
Roller	No	20		80	200	0
Scraper	No	40		83.6	200	0
Welder / Torch	No	40		74	200	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day		Evening		Night
			Lmax	Leq	Lmax	Leq	Lmax
Auger Drill Rig	72.3	65.3	N/A	N/A	N/A	N/A	N/A
Backhoe	65.5	61.5	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	71.2	64.2	N/A	N/A	N/A	N/A	N/A
Compressor (air)	65.6	61.6	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	66.8	62.8	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck	69.4	62.4	N/A	N/A	N/A	N/A	N/A
Crane	68.5	60.6	N/A	N/A	N/A	N/A	N/A
Dozer	69.6	65.6	N/A	N/A	N/A	N/A	N/A
Dump Truck	64.4	60.4	N/A	N/A	N/A	N/A	N/A
Excavator	68.7	64.7	N/A	N/A	N/A	N/A	N/A
Front End Loader	67.1	63.1	N/A	N/A	N/A	N/A	N/A
Generator	68.6	65.6	N/A	N/A	N/A	N/A	N/A
Grader	73	69	N/A	N/A	N/A	N/A	N/A
Jackhammer	76.8	69.9	N/A	N/A	N/A	N/A	N/A
Paver	65.2	62.2	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	73.1	70.1	N/A	N/A	N/A	N/A	N/A
Roller	68	61	N/A	N/A	N/A	N/A	N/A
Scraper	71.5	67.6	N/A	N/A	N/A	N/A	N/A
Welder / Torch	62	58	N/A	N/A	N/A	N/A	N/A
Total	76.8	78.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

---- Receptor #5 ----

Description	Land Use	Baselines (dBA)			Equipment			
		Daytime	Evening	Night	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
250ft Example	Residential	1	1	1				
Description		Device	Usage(%)					
Auger Drill Rig		No	20		84.4	250	0	

Backhoe	No	40		77.6	250	0
Compactor (ground)	No	20		83.2	250	0
Compressor (air)	No	40		77.7	250	0
Concrete Mixer Truck	No	40		78.8	250	0
Concrete Pump Truck	No	20		81.4	250	0
Crane	No	16		80.6	250	0
Dozer	No	40		81.7	250	0
Dump Truck	No	40		76.5	250	0
Excavator	No	40		80.7	250	0
Front End Loader	No	40		79.1	250	0
Generator	No	50		80.6	250	0
Grader	No	40	85		250	0
Jackhammer	Yes	20		88.9	250	0
Paver	No	50		77.2	250	0
Pneumatic Tools	No	50		85.2	250	0
Roller	No	20		80	250	0
Scraper	No	40		83.6	250	0
Welder / Torch	No	40		74	250	0

Results

Equipment	Calculated (dBA)		Noise Limits (dBA)				
	*Lmax	Leq	Day		Evening		Night
			Lmax	Leq	Lmax	Leq	Lmax
Auger Drill Rig	70.4	63.4	N/A	N/A	N/A	N/A	N/A
Backhoe	63.6	59.6	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	69.3	62.3	N/A	N/A	N/A	N/A	N/A
Compressor (air)	63.7	59.7	N/A	N/A	N/A	N/A	N/A
Concrete Mixer Truck	64.8	60.8	N/A	N/A	N/A	N/A	N/A
Concrete Pump Truck	67.4	60.4	N/A	N/A	N/A	N/A	N/A
Crane	66.6	58.6	N/A	N/A	N/A	N/A	N/A
Dozer	67.7	63.7	N/A	N/A	N/A	N/A	N/A
Dump Truck	62.5	58.5	N/A	N/A	N/A	N/A	N/A
Excavator	66.7	62.8	N/A	N/A	N/A	N/A	N/A
Front End Loader	65.1	61.2	N/A	N/A	N/A	N/A	N/A
Generator	66.7	63.6	N/A	N/A	N/A	N/A	N/A
Grader	71	67	N/A	N/A	N/A	N/A	N/A
Jackhammer	74.9	67.9	N/A	N/A	N/A	N/A	N/A
Paver	63.2	60.2	N/A	N/A	N/A	N/A	N/A
Pneumatic Tools	71.2	68.2	N/A	N/A	N/A	N/A	N/A
Roller	66	59	N/A	N/A	N/A	N/A	N/A
Scraper	69.6	65.6	N/A	N/A	N/A	N/A	N/A
Welder / Torch	60	56	N/A	N/A	N/A	N/A	N/A
Total	74.9	76.1	N/A	N/A	N/A	N/A	N/A

*Calculated Lmax is the Loudest value.

1. Intersection of Main St. and Mariposa Ave.

Summary

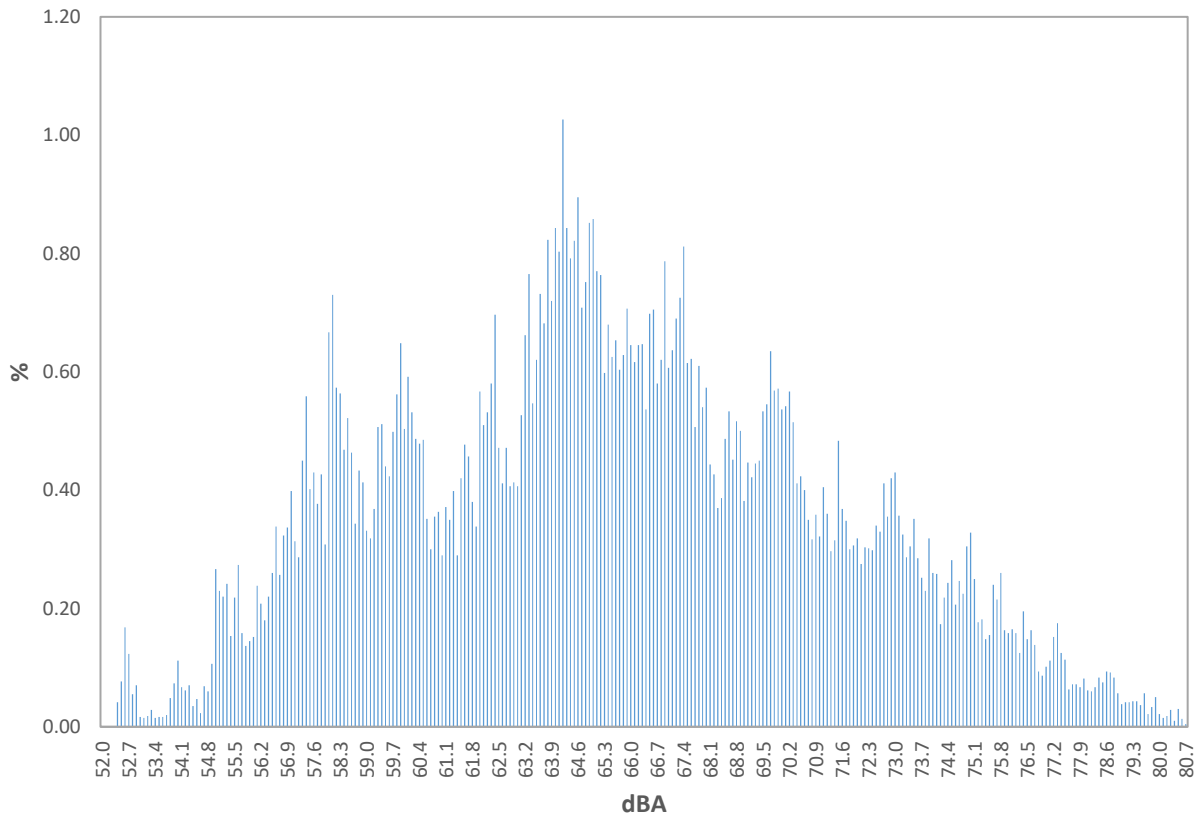
Date September 7, 2023
Start Time 11:51am
End Time 12:01pm
File Name 831_Data.111
Device Model Larson Davis Model 831
Weighting A
Response Slow

Results

Description	Value	Description	Value
L _{eq}	69.2dB	L ₁₀	73.4dB
L _{max}	80.7dB	L ₅₀	65.2dB
L _{min}	52.4dB	L ₉₀	58.0dB

LAS > 65.0 dBA (Exceedance Count/Duration): 20. 379.0s
LAS > 85.0 dBA (Exceedance Count/Duration): 0, 0.0s

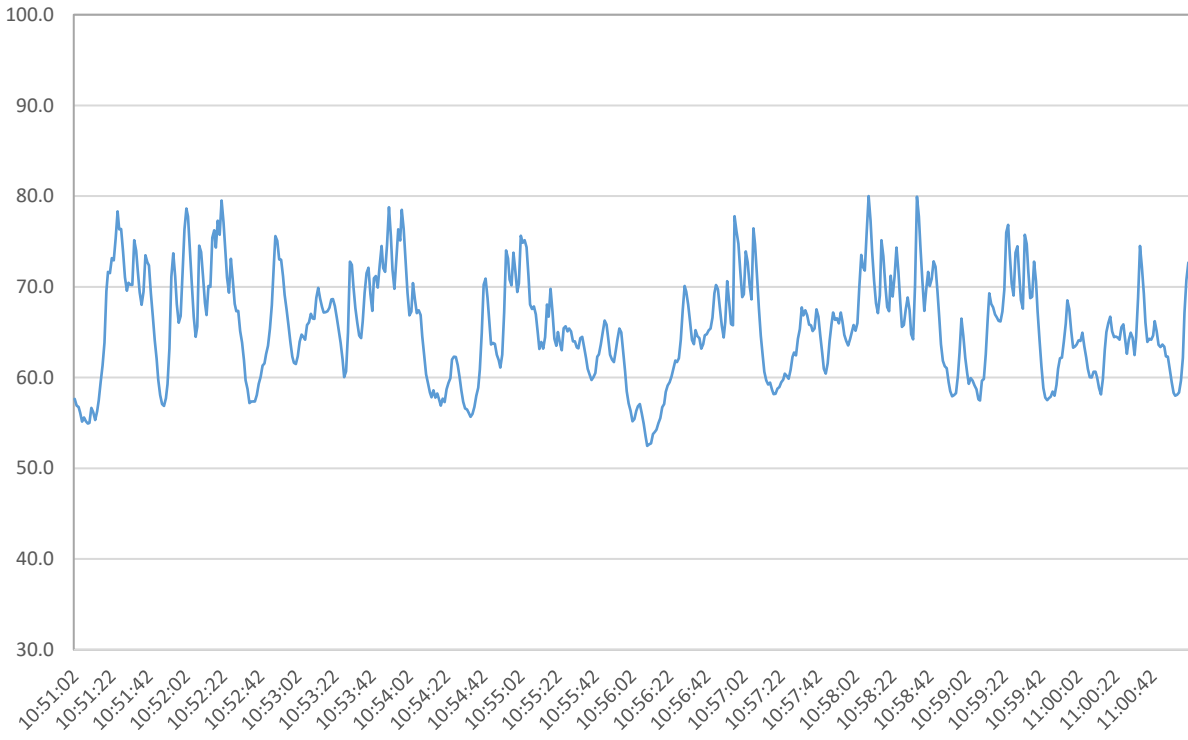
Statistics Chart



Statistics Table

dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
52.0	0.00	0.00	0.00	0.00	0.04	0.08	0.17	0.12	0.06	0.07	0.5
53.0	0.02	0.02	0.02	0.03	0.02	0.02	0.02	0.02	0.05	0.07	0.3
54.0	0.11	0.07	0.06	0.07	0.04	0.05	0.02	0.07	0.06	0.11	0.65
55.0	0.27	0.23	0.22	0.24	0.15	0.22	0.27	0.16	0.14	0.15	2.04
56.0	0.15	0.24	0.21	0.18	0.22	0.26	0.34	0.26	0.32	0.34	2.51
57.0	0.40	0.31	0.29	0.45	0.56	0.40	0.43	0.38	0.43	0.31	3.95
58.0	0.67	0.73	0.57	0.56	0.47	0.52	0.46	0.34	0.43	0.41	5.18
59.0	0.33	0.32	0.37	0.51	0.51	0.44	0.42	0.50	0.56	0.65	4.61
60.0	0.50	0.59	0.53	0.49	0.48	0.49	0.35	0.30	0.36	0.36	4.45
61.0	0.29	0.37	0.35	0.40	0.29	0.42	0.48	0.46	0.38	0.34	3.77
62.0	0.57	0.51	0.53	0.58	0.70	0.47	0.41	0.47	0.41	0.41	5.06
63.0	0.41	0.53	0.66	0.77	0.55	0.62	0.73	0.68	0.82	0.72	6.48
64.0	0.84	0.80	1.03	0.84	0.79	0.82	0.90	0.71	0.75	0.85	8.34
65.0	0.86	0.77	0.76	0.60	0.68	0.63	0.65	0.60	0.63	0.71	6.89
66.0	0.65	0.62	0.65	0.65	0.54	0.70	0.71	0.58	0.62	0.79	6.48
67.0	0.61	0.64	0.69	0.73	0.81	0.62	0.62	0.51	0.61	0.54	6.36
68.0	0.57	0.44	0.43	0.37	0.39	0.49	0.53	0.45	0.52	0.50	4.69
69.0	0.38	0.45	0.42	0.45	0.45	0.53	0.55	0.64	0.57	0.57	5.00
70.0	0.54	0.54	0.57	0.52	0.41	0.42	0.40	0.35	0.32	0.36	4.42
71.0	0.32	0.41	0.36	0.30	0.32	0.48	0.37	0.35	0.30	0.31	3.51
72.0	0.32	0.28	0.30	0.30	0.30	0.34	0.33	0.41	0.36	0.42	3.35
73.0	0.43	0.36	0.33	0.29	0.31	0.35	0.29	0.25	0.23	0.32	3.14
74.0	0.26	0.26	0.17	0.22	0.24	0.28	0.21	0.25	0.23	0.31	2.42
75.0	0.33	0.25	0.18	0.18	0.15	0.16	0.24	0.22	0.26	0.16	2.12
76.0	0.16	0.17	0.16	0.13	0.20	0.15	0.16	0.14	0.09	0.09	1.43
77.0	0.10	0.11	0.15	0.18	0.13	0.11	0.06	0.07	0.07	0.07	1.05
78.0	0.08	0.06	0.06	0.07	0.08	0.08	0.09	0.09	0.08	0.06	0.75
79.0	0.04	0.04	0.04	0.04	0.04	0.04	0.06	0.02	0.03	0.05	0.41
80.0	0.02	0.02	0.02	0.03	0.01	0.03	0.01	0.01	0.00	0.00	0.14

Logged Data Chart



2. Intersection of Main St. and Holly Ave.

Summary

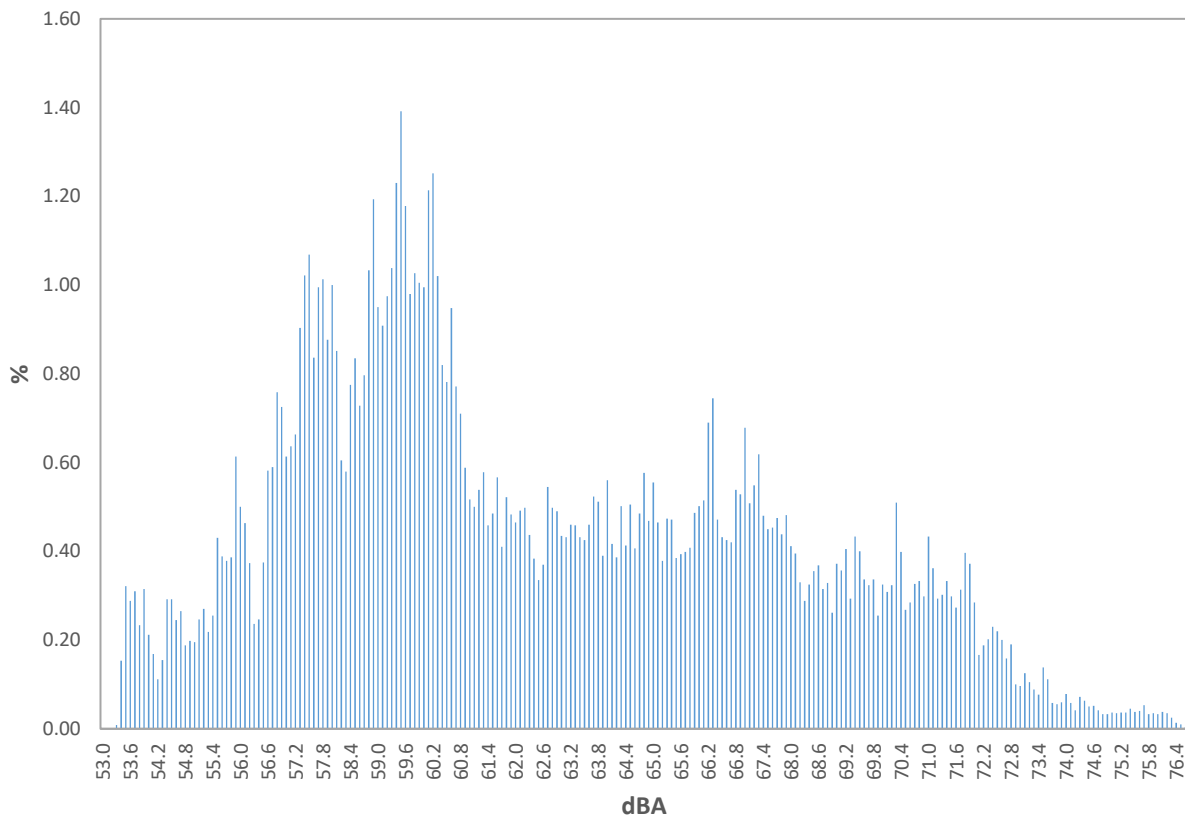
Date September 7, 2023
Start Time 12:05pm
End Time 12:15pm
File Name 831_Data.112
Device Model Larson Davis Model 831
Weighting A
Response Slow

Results

<u>Description</u>	<u>Value</u>	<u>Description</u>	<u>Value</u>
L _{eq}	65.7dB	L ₁₀	70.2dB
L _{max}	76.6dB	L ₅₀	61.2dB
L _{min}	53.3dB	L ₉₀	56.7dB

LAS > 65.0 dBA (Exceedance Count/Duration): 20, 225.0s
LAS > 85.0 dBA (Exceedance Count/Duration): 0, 0.0s

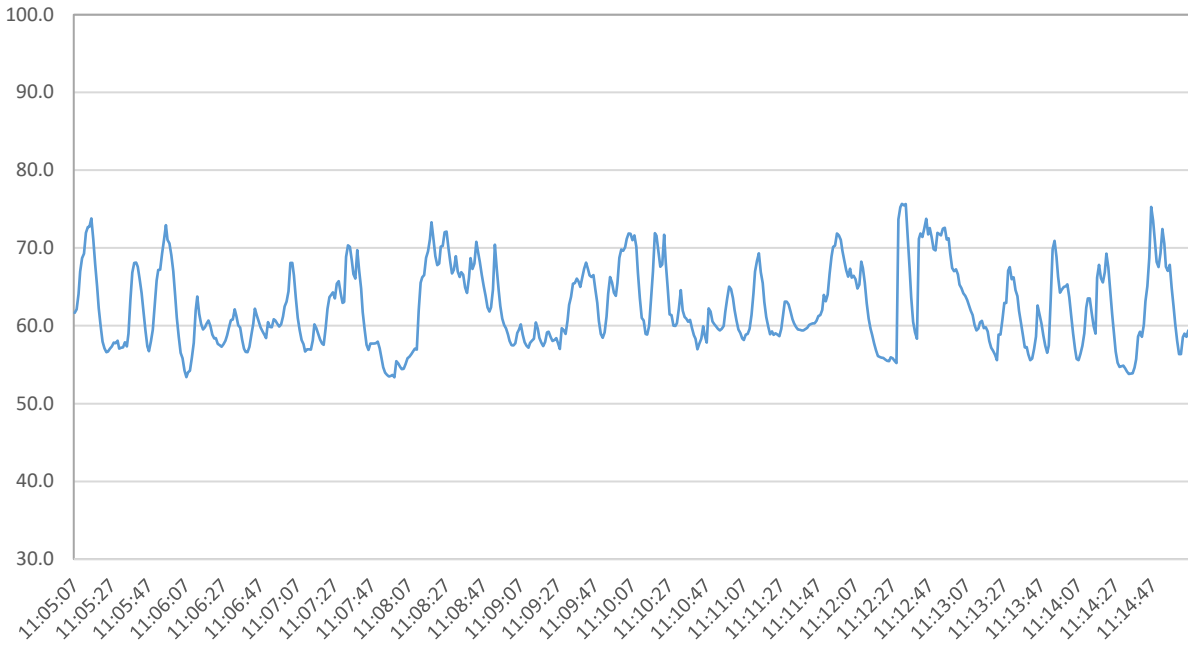
Statistics Chart



Statistics Table

dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
53.0	0.00	0.00	0.00	0.01	0.15	0.32	0.29	0.31	0.23	0.32	1.6
54.0	0.21	0.17	0.11	0.16	0.29	0.29	0.25	0.27	0.19	0.20	2.1
55.0	0.20	0.25	0.27	0.22	0.26	0.43	0.39	0.38	0.39	0.61	3.38
56.0	0.50	0.46	0.37	0.24	0.25	0.38	0.58	0.59	0.76	0.73	4.85
57.0	0.61	0.64	0.66	0.90	1.02	1.07	0.84	1.00	1.01	0.88	8.63
58.0	1.00	0.85	0.61	0.58	0.78	0.84	0.73	0.80	1.03	1.19	8.40
59.0	0.95	0.91	0.98	1.04	1.23	1.39	1.18	0.98	1.03	1.01	10.68
60.0	1.00	1.21	1.25	1.02	0.82	0.78	0.95	0.77	0.71	0.59	9.10
61.0	0.52	0.50	0.54	0.58	0.46	0.49	0.57	0.41	0.52	0.48	5.06
62.0	0.47	0.49	0.50	0.44	0.38	0.34	0.37	0.55	0.50	0.49	4.51
63.0	0.44	0.43	0.46	0.46	0.43	0.43	0.46	0.52	0.51	0.39	4.53
64.0	0.56	0.42	0.39	0.50	0.41	0.51	0.41	0.49	0.58	0.47	4.72
65.0	0.56	0.47	0.38	0.47	0.47	0.39	0.39	0.40	0.41	0.49	4.41
66.0	0.50	0.52	0.69	0.75	0.47	0.43	0.43	0.42	0.54	0.53	5.27
67.0	0.68	0.51	0.55	0.62	0.48	0.45	0.45	0.48	0.44	0.48	5.13
68.0	0.41	0.40	0.33	0.29	0.33	0.36	0.37	0.32	0.33	0.26	3.38
69.0	0.37	0.36	0.41	0.29	0.43	0.40	0.34	0.32	0.34	0.26	3.51
70.0	0.33	0.31	0.32	0.51	0.40	0.27	0.29	0.33	0.33	0.30	3.38
71.0	0.43	0.36	0.29	0.30	0.33	0.30	0.27	0.31	0.40	0.37	3.38
72.0	0.29	0.17	0.19	0.20	0.23	0.22	0.20	0.16	0.19	0.10	1.94
73.0	0.10	0.13	0.11	0.09	0.08	0.14	0.11	0.06	0.06	0.06	0.91
74.0	0.08	0.06	0.04	0.07	0.06	0.05	0.05	0.04	0.03	0.03	0.52
75.0	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.03	0.04	0.39
76.0	0.03	0.04	0.04	0.03	0.01	0.01	0.00	0.00	0.00	0.00	0.16

Logged Data Chart



3. Intersection of Main St. and Grand Ave.

Summary

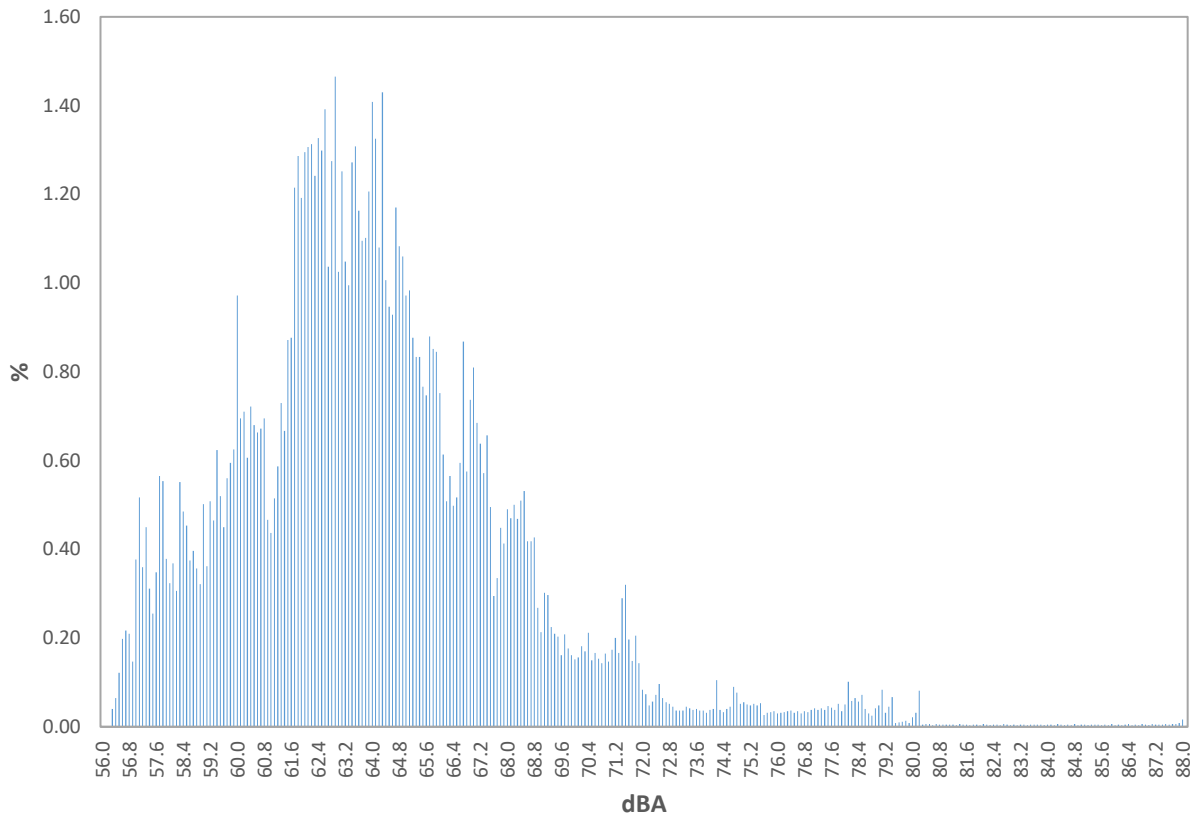
Date September 7, 2023
Start Time 12:18pm
End Time 12:28pm
File Name 831_Data.113
Device Model Larson Davis Model 831
Weighting A
Response Slow

Results

<u>Description</u>	<u>Value</u>	<u>Description</u>	<u>Value</u>
L _{eq}	67.7dB	L ₁₀	68.9dB
L _{max}	88.1dB	L ₅₀	63.6dB
L _{min}	56.3dB	L ₉₀	59.2dB

LAS > 65.0 dBA (Exceedance Count/Duration): 23, 277.4s
LAS > 85.0 dBA (Exceedance Count/Duration): 1, 1.6s

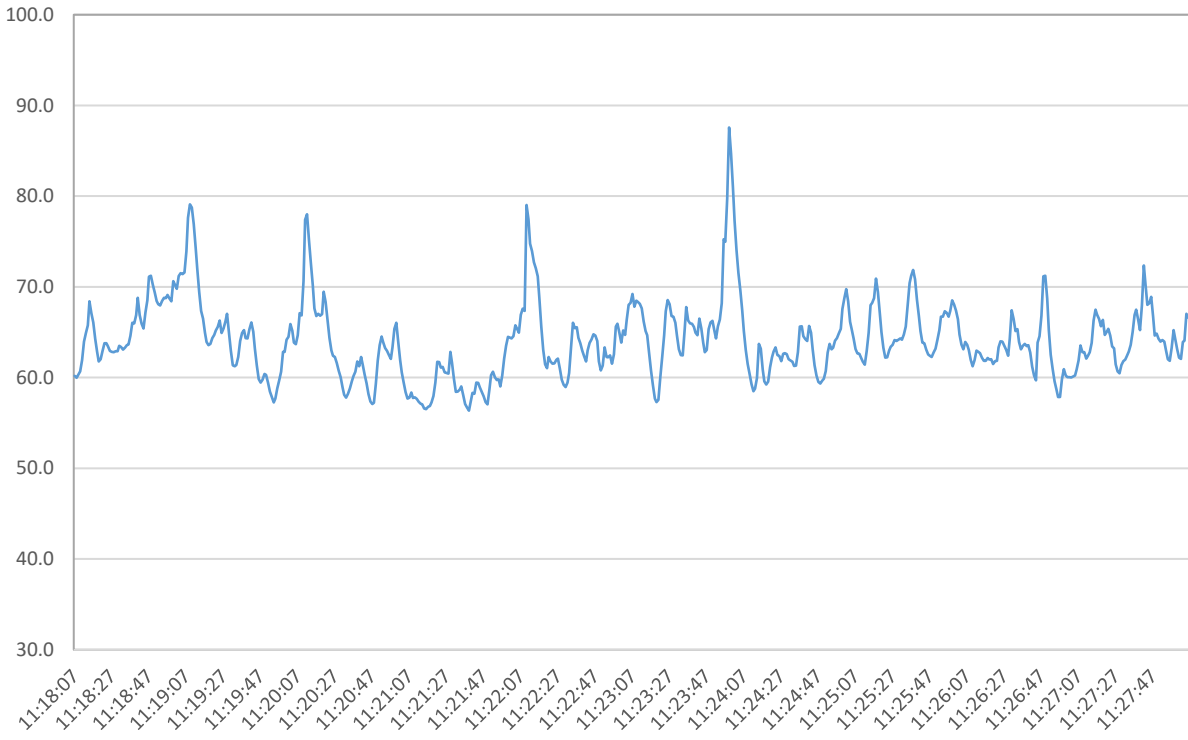
Statistics Chart



Statistics Table

dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
56.0	0.00	0.00	0.00	0.04	0.07	0.12	0.20	0.22	0.21	0.15	1.0
57.0	0.38	0.52	0.36	0.45	0.31	0.26	0.35	0.57	0.55	0.38	4.1
58.0	0.32	0.37	0.31	0.55	0.49	0.45	0.38	0.40	0.36	0.32	3.94
59.0	0.50	0.36	0.51	0.47	0.62	0.52	0.45	0.56	0.60	0.63	5.21
60.0	0.97	0.70	0.71	0.61	0.72	0.68	0.66	0.67	0.70	0.47	6.88
61.0	0.44	0.52	0.59	0.73	0.67	0.87	0.88	1.22	1.29	1.19	8.38
62.0	1.30	1.31	1.31	1.24	1.33	1.30	1.39	1.04	1.28	1.47	12.95
63.0	1.03	1.25	1.05	1.00	1.27	1.31	1.16	1.10	1.10	1.21	11.47
64.0	1.41	1.33	1.08	1.43	1.01	0.95	0.93	1.17	1.08	1.06	11.44
65.0	0.97	0.98	0.88	0.83	0.83	0.77	0.75	0.88	0.85	0.85	8.59
66.0	0.75	0.61	0.51	0.57	0.50	0.52	0.60	0.87	0.58	0.74	6.23
67.0	0.81	0.69	0.64	0.57	0.66	0.50	0.30	0.34	0.45	0.41	5.35
68.0	0.49	0.47	0.50	0.47	0.51	0.53	0.42	0.42	0.43	0.27	4.50
69.0	0.21	0.30	0.30	0.23	0.21	0.20	0.16	0.21	0.18	0.16	2.16
70.0	0.15	0.16	0.18	0.17	0.21	0.15	0.17	0.15	0.14	0.17	1.65
71.0	0.15	0.17	0.20	0.17	0.29	0.32	0.20	0.15	0.21	0.14	1.99
72.0	0.08	0.07	0.05	0.06	0.07	0.10	0.07	0.06	0.05	0.05	0.65
73.0	0.04	0.04	0.04	0.05	0.04	0.04	0.04	0.04	0.04	0.03	0.38
74.0	0.04	0.04	0.11	0.04	0.03	0.04	0.05	0.09	0.08	0.05	0.56
75.0	0.06	0.05	0.05	0.05	0.05	0.05	0.03	0.03	0.03	0.04	0.43
76.0	0.03	0.03	0.03	0.04	0.04	0.03	0.04	0.03	0.04	0.03	0.33
77.0	0.04	0.04	0.04	0.04	0.04	0.05	0.04	0.04	0.05	0.04	0.41
78.0	0.05	0.10	0.06	0.07	0.06	0.07	0.04	0.03	0.03	0.04	0.54
79.0	0.05	0.08	0.03	0.05	0.07	0.01	0.01	0.01	0.01	0.01	0.33
80.0	0.02	0.03	0.08	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.17
81.0	0.01	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.01	0.05
82.0	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.00	0.05
83.0	0.01	0.00	0.01	0.01	0.00	0.01	0.01	0.01	0.01	0.00	0.04
84.0	0.01	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.00	0.05
85.0	0.01	0.01	0.00	0.01	0.01	0.01	0.00	0.01	0.00	0.01	0.05
86.0	0.00	0.01	0.00	0.01	0.01	0.00	0.01	0.00	0.01	0.01	0.05
87.0	0.00	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.06
88.0	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02

Logged Data Chart



4. Intersection of Main St. and El Segundo Blvd.

Summary

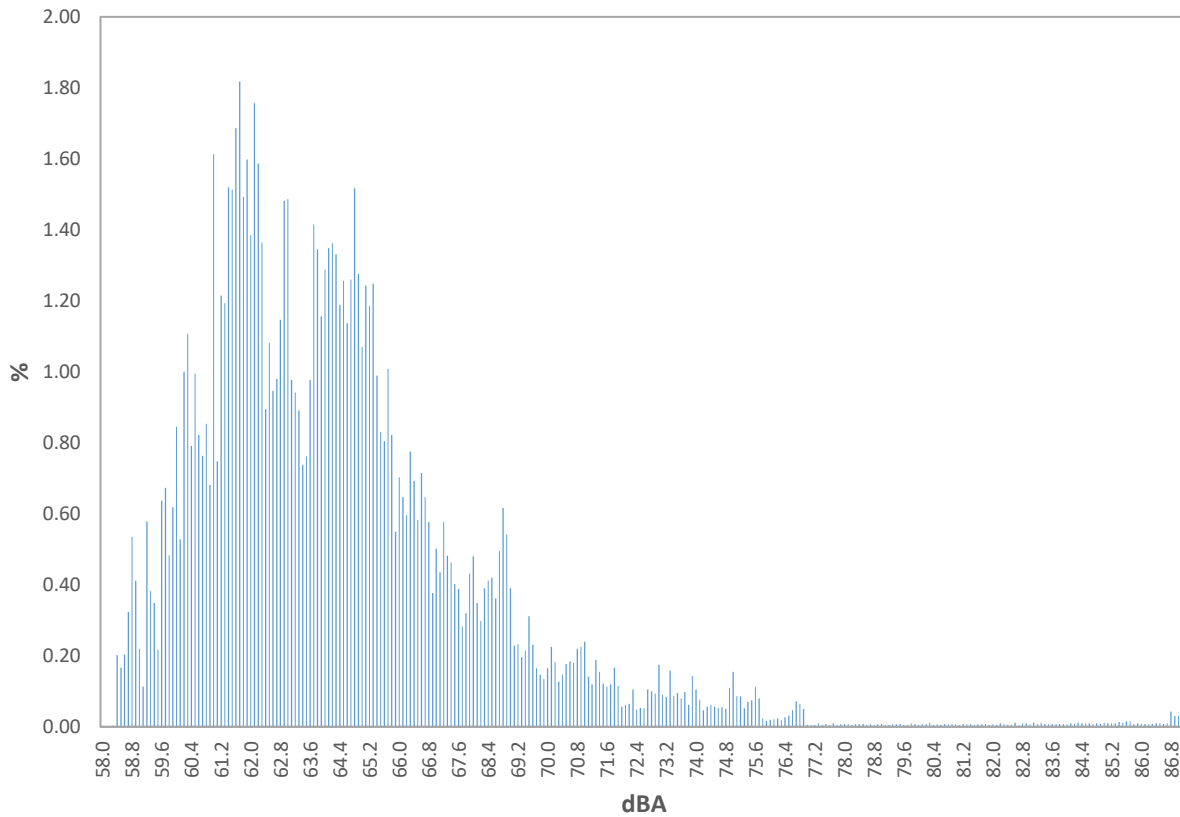
Date September 7, 2023
Start Time 12:31pm
End Time 12:41pm
File Name 831_Data.114
Device Model Larson Davis Model 831
Weighting A
Response Slow

Results

Description	Value	Description	Value
L _{eq}	68.0dB	L ₁₀	69.0dB
L _{max}	87.2dB	L ₅₀	63.8dB
L _{min}	58.3dB	L ₉₀	60.4dB

LAS > 65.0 dBA (Exceedance Count/Duration): 21, 300.6s
LAS > 85.0 dBA (Exceedance Count/Duration): 1, 2.8s

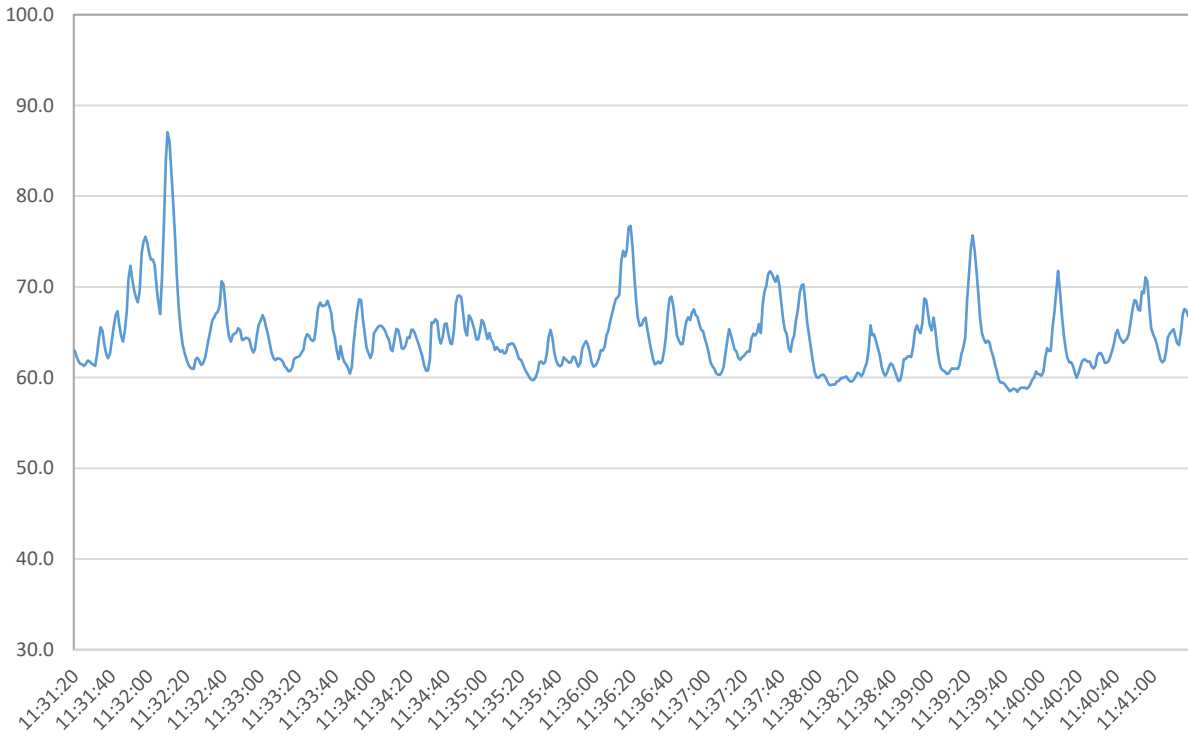
Statistics Chart



Statistics Table

dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
58.0	0.00	0.00	0.00	0.00	0.20	0.17	0.20	0.32	0.54	0.41	1.8
59.0	0.22	0.11	0.58	0.38	0.35	0.22	0.64	0.67	0.48	0.62	4.3
60.0	0.85	0.53	1.00	1.11	0.79	1.00	0.82	0.76	0.85	0.68	8.39
61.0	1.61	0.75	1.22	1.19	1.52	1.51	1.69	1.82	1.49	1.60	14.40
62.0	1.39	1.76	1.59	1.37	0.90	1.08	0.95	0.98	1.15	1.48	12.63
63.0	1.49	0.98	0.94	0.89	0.74	0.76	0.98	1.42	1.35	1.16	10.69
64.0	1.29	1.35	1.36	1.33	1.19	1.26	1.14	1.26	1.52	1.28	12.96
65.0	1.07	1.24	1.19	1.25	0.99	0.83	0.81	1.01	0.82	0.55	9.75
66.0	0.70	0.65	0.60	0.78	0.69	0.58	0.72	0.65	0.58	0.38	6.31
67.0	0.50	0.44	0.58	0.48	0.46	0.40	0.39	0.28	0.32	0.43	4.28
68.0	0.48	0.35	0.30	0.39	0.41	0.42	0.36	0.50	0.62	0.54	4.36
69.0	0.39	0.23	0.23	0.20	0.22	0.31	0.23	0.17	0.15	0.14	2.25
70.0	0.17	0.23	0.18	0.13	0.15	0.18	0.19	0.18	0.22	0.23	1.83
71.0	0.24	0.14	0.12	0.19	0.16	0.12	0.11	0.12	0.17	0.12	1.48
72.0	0.06	0.06	0.07	0.11	0.05	0.05	0.05	0.11	0.10	0.09	0.74
73.0	0.18	0.09	0.08	0.16	0.09	0.10	0.08	0.10	0.06	0.14	1.07
74.0	0.11	0.08	0.05	0.06	0.06	0.06	0.05	0.06	0.05	0.11	0.67
75.0	0.16	0.09	0.09	0.05	0.07	0.08	0.11	0.08	0.02	0.02	0.76
76.0	0.02	0.02	0.02	0.02	0.03	0.03	0.05	0.07	0.07	0.05	0.38
77.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07
78.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07
79.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07
80.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07
81.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.07
82.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.00	0.01	0.01	0.07
83.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.08
84.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.09
85.0	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.11
86.0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.04	0.03	0.14
87.0	0.03	0.05	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.09

Logged Data Chart



5. Intersection of Richmond St. and Grand Ave.

Summary

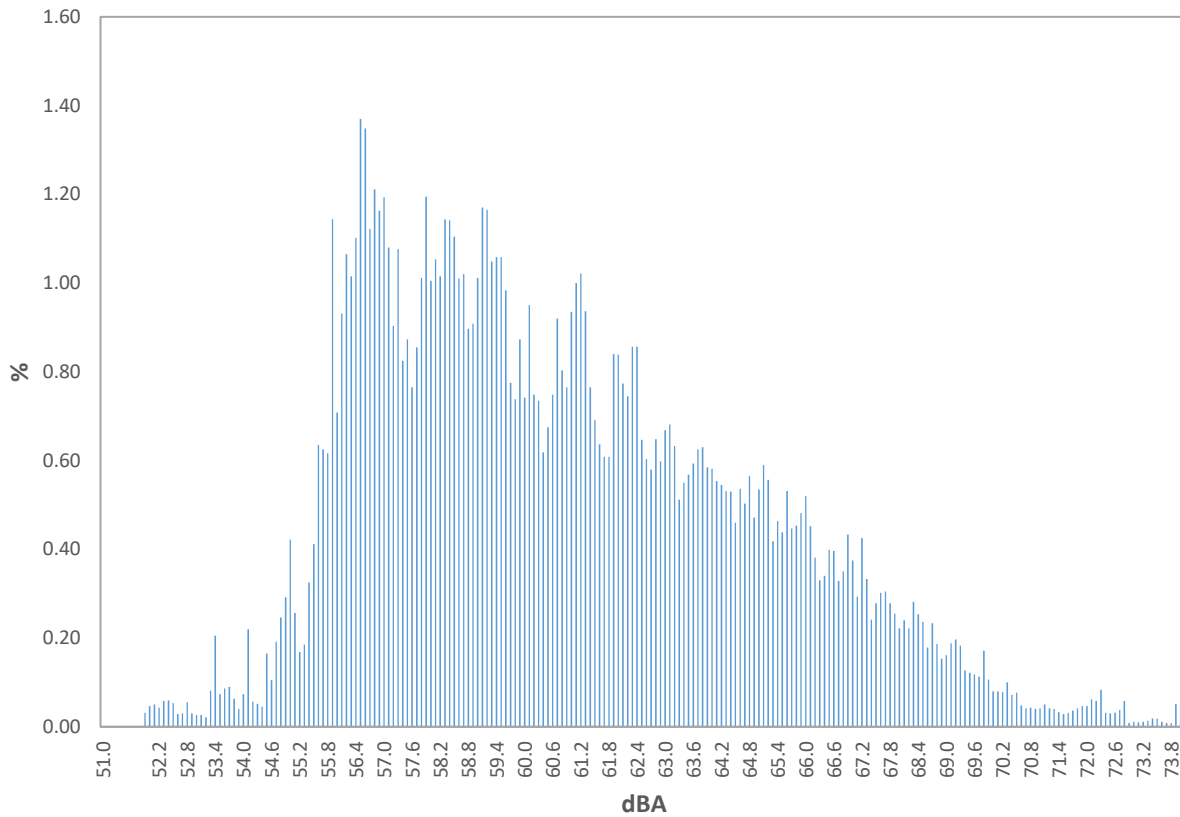
Date September 7, 2023
Start Time 12:46pm
End Time 12:56pm
File Name 831_Data.115
Device Model Larson Davis Model 831
Weighting A
Response Slow

Results

Description	Value	Description	Value
L _{eq}	62.9dB	L ₁₀	69.0dB
L _{max}	74.1dB	L ₅₀	63.8dB
L _{min}	51.9dB	L ₉₀	60.4dB

LAS > 65.0 dBA (Exceedance Count/Duration): 22, 142.0s
LAS > 85.0 dBA (Exceedance Count/Duration): 0, 0.0s

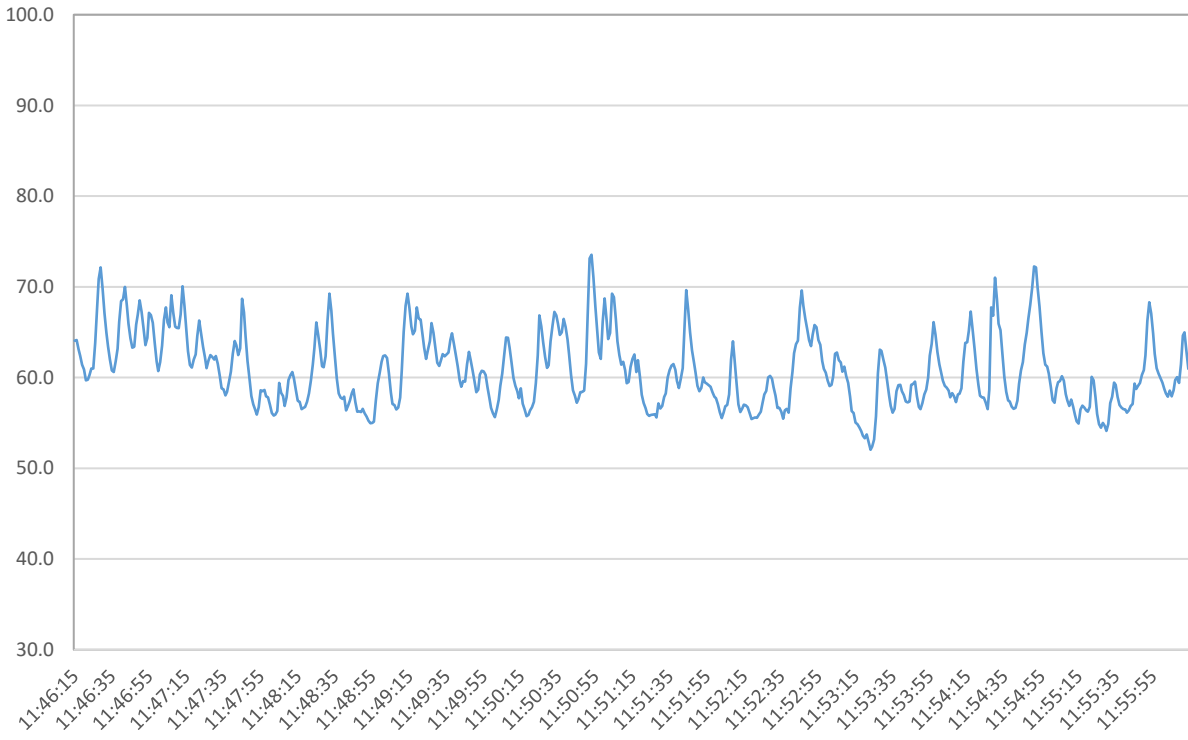
Statistics Chart



Statistics Table

dB	0.0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	%
51.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.0
52.0	0.05	0.05	0.04	0.06	0.06	0.05	0.03	0.03	0.06	0.03	0.5
53.0	0.03	0.03	0.02	0.08	0.21	0.07	0.09	0.09	0.06	0.04	0.72
54.0	0.07	0.22	0.06	0.05	0.05	0.17	0.11	0.19	0.25	0.29	1.45
55.0	0.42	0.26	0.17	0.19	0.33	0.41	0.64	0.63	0.62	1.14	4.79
56.0	0.71	0.93	1.07	1.02	1.10	1.37	1.35	1.12	1.21	1.16	11.04
57.0	1.19	1.08	0.90	1.08	0.83	0.87	0.77	0.86	1.01	1.20	9.78
58.0	1.01	1.05	1.02	1.14	1.14	1.11	1.01	1.02	0.90	0.91	10.30
59.0	1.01	1.17	1.17	1.05	1.06	1.06	0.98	0.78	0.74	0.87	9.88
60.0	0.74	0.95	0.75	0.74	0.62	0.68	0.75	0.92	0.80	0.77	7.70
61.0	0.94	1.00	1.02	0.94	0.77	0.69	0.64	0.61	0.61	0.84	8.04
62.0	0.84	0.77	0.75	0.86	0.86	0.65	0.60	0.58	0.65	0.60	7.15
63.0	0.67	0.68	0.63	0.51	0.55	0.57	0.59	0.63	0.63	0.59	6.05
64.0	0.58	0.55	0.55	0.53	0.53	0.46	0.54	0.50	0.57	0.47	5.28
65.0	0.54	0.59	0.56	0.42	0.46	0.44	0.53	0.45	0.45	0.48	4.92
66.0	0.52	0.45	0.38	0.33	0.34	0.40	0.40	0.33	0.35	0.43	3.93
67.0	0.38	0.29	0.43	0.33	0.24	0.28	0.30	0.31	0.28	0.26	3.09
68.0	0.22	0.24	0.22	0.28	0.25	0.24	0.18	0.23	0.19	0.15	2.21
69.0	0.16	0.19	0.20	0.18	0.13	0.12	0.12	0.11	0.17	0.11	1.49
70.0	0.08	0.08	0.08	0.10	0.07	0.08	0.05	0.04	0.04	0.04	0.66
71.0	0.04	0.05	0.04	0.04	0.03	0.03	0.03	0.04	0.04	0.05	0.39
72.0	0.05	0.06	0.06	0.08	0.03	0.03	0.03	0.04	0.06	0.01	0.45
73.0	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.05	0.16
74.0	0.05	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06

Logged Data Chart



RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM EI Segundo E of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	52.1	66	52.1	10	----	52.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM Grand E of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	54.1	66	54.1	10	----	54.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>			6 September 2023									
NTEC			TNM 2.5									
			Calculated with TNM 2.5									
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			Downtown Specific Plan Update									
RUN:			Project: AM Grand W of Main									
BARRIER DESIGN:			INPUT HEIGHTS									
			Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.									
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	54.8	66	54.8	10	----	54.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>			6 September 2023									
NTEC			TNM 2.5									
			Calculated with TNM 2.5									
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			Downtown Specific Plan Update									
RUN:			Project: AM Main N of El Segundo									
BARRIER DESIGN:			INPUT HEIGHTS									
			Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.									
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB			dB	dB	dB	dB
50ft from centerline	1	1	0.0	51.8	66	51.8	10	----	51.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM Main N of Grand										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	55.0	66	55.0	10	----	55.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM Main St N of Mariposa Ave										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	55.5	66	55.5	10	----	55.5	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>			6 September 2023									
NTEC			TNM 2.5									
			Calculated with TNM 2.5									
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			Downtown Specific Plan Update									
RUN:			Project: AM Main S of Grand									
BARRIER DESIGN:			INPUT HEIGHTS									
			Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.									
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	53.2	66	53.2	10	----	53.2	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM Main St S of Mariposa Ave										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	55.4	66	55.4	10	----	55.4	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM Mariposa E of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	43.8	66	43.8	10	----	43.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: AM Mariposa W of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	45.1	66	45.1	10	----	45.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM EI Segundo E of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	53.6	66	53.6	10	----	53.6	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM Grand E of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB			dB	dB	dB	dB
50ft from centerline	1	1	0.0	55.8	66	55.8	10	----	55.8	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>													6 September 2023																							
NTEC													TNM 2.5																							
													Calculated with TNM 2.5																							
RESULTS: SOUND LEVELS																																				
PROJECT/CONTRACT:													Downtown Specific Plan Update																							
RUN:													Project: PM Grand W of Main																							
BARRIER DESIGN:													INPUT HEIGHTS																							
													Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.																							
ATMOSPHERICS:													68 deg F, 50% RH																							
Receiver																																				
Name													No.		#DUs		Existing		No Barrier		With Barrier															
															LAeq1h		LAeq1h		Increase over existing		Type		Calculated		Noise Reduction											
																	Calculated		Crit'n		Calculated		Crit'n		Impact		LAeq1h		Calculated		Goal		Calculated			
																															minus		Goal			
															dBA		dBA		dBA		dB		dB				dBA		dB		dB		dB			
50ft from centerline													1		1		0.0		56.2		66		56.2		10		----		56.2		0.0		8		-8.0	
Dwelling Units															# DUs		Noise Reduction																			
																	Min		Avg		Max															
															dB		dB		dB																	
All Selected															1		0.0		0.0		0.0															
All Impacted															0		0.0		0.0		0.0															
All that meet NR Goal															0		0.0		0.0		0.0															

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM Main N of El Segundo										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB			dB	dB	dB	dB
50ft from centerline	1	1	0.0	53.6	66	53.6	10	----	53.6	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM Main N of Grand										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
50ft from centerline	1	1	0.0	56.2	66	56.2	10	----	56.2	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM Main St N of Mariposa Ave										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	57.0	66	57.0	10	----	57.0	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>			6 September 2023									
NTEC			TNM 2.5									
			Calculated with TNM 2.5									
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			Downtown Specific Plan Update									
RUN:			Project: PM Main S of Grand									
BARRIER DESIGN:			INPUT HEIGHTS									
			Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.									
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	54.7	66	54.7	10	----	54.7	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM Main St S of Mariposa Ave										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	56.7	66	56.7	10	----	56.7	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>		6 September 2023										
NTEC		TNM 2.5										
		Calculated with TNM 2.5										
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:		Downtown Specific Plan Update										
RUN:		Project: PM Mariposa E of Main										
BARRIER DESIGN:		INPUT HEIGHTS										
		Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.										
ATMOSPHERICS:		68 deg F, 50% RH										
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
							Sub'l Inc					
			dB	dB	dB	dB	dB		dB	dB	dB	dB
50ft from centerline	1	1	0.0	45.1	66	45.1	10	----	45.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

RESULTS: SOUND LEVELS

Downtown Specific Plan Update

<Organization?>			6 September 2023									
NTEC			TNM 2.5									
			Calculated with TNM 2.5									
RESULTS: SOUND LEVELS												
PROJECT/CONTRACT:			Downtown Specific Plan Update									
RUN:			Project: PM Mariposa W of Main									
BARRIER DESIGN:			INPUT HEIGHTS									
			Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.									
ATMOSPHERICS:			68 deg F, 50% RH									
Receiver												
Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h	Increase over existing		Type	With Barrier		Noise Reduction		
				Calculated	Crit'n	Calculated	Crit'n	Impact	Calculated LAeq1h	Calculated	Goal	Calculated minus Goal
			dB	dB	dB	dB			dB	dB	dB	dB
50ft from centerline	1	1	0.0	48.1	66	48.1	10	----	48.1	0.0	8	-8.0
Dwelling Units		# DUs	Noise Reduction									
			Min	Avg	Max							
			dB	dB	dB							
All Selected		1	0.0	0.0	0.0							
All Impacted		0	0.0	0.0	0.0							
All that meet NR Goal		0	0.0	0.0	0.0							

Vibration Impact Analysis

noah tanski environmental consulting

Typical Construction Equipment Groundborne Vibration Levels - PPV (in/sec)

<u>Vibratory Roller</u>		
Equipment:	Vibratory Roller	
Equipment PPV (in/sec):	0.21	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.210
Example at 50ft	50	0.098
Example at 75ft	75	0.063
Example at 100ft	100	0.046
Example at 125ft	125	0.036
-	-	-

<u>Large Bulldozer</u>		
Equipment:	Large Bulldozer	
Equipment PPV (in/sec):	0.089	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.089
Example at 50ft	50	0.042
Example at 75ft	75	0.027
Example at 100ft	100	0.019
Example at 125ft	125	0.015
-	-	-

<u>Small Bulldozer</u>		
Equipment:	Small Bulldozer	
Equipment PPV (in/sec):	0.003	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.003
Example at 50ft	50	0.001
Example at 75ft	75	0.001
Example at 100ft	100	0.001
Example at 125ft	125	0.001
-	-	-

<u>Auger Drill</u>		
Equipment:	Auger Drill	
Equipment PPV (in/sec):	0.089	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.089
Example at 50ft	50	0.042
Example at 75ft	75	0.027
Example at 100ft	100	0.019
Example at 125ft	125	0.015
-	-	-

<u>Loaded Truck</u>		
Equipment:	Loaded Truck	
Equipment PPV (in/sec):	0.076	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.076
Example at 50ft	50	0.035
Example at 75ft	75	0.023
Example at 100ft	100	0.017
Example at 125ft	125	0.013
-	-	-

<u>Jackhammer</u>		
Equipment:	Jackhammer	
Equipment PPV (in/sec):	0.035	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.035
Example at 50ft	50	0.016
Example at 75ft	75	0.010
Example at 100ft	100	0.008
Example at 125ft	125	0.006
-	-	-

<u>Impact Pile Driver (Upper Range)</u>		
Equipment:	Impact Pile Driver (Upper Range)	
Equipment PPV (in/sec):	1.518	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	1.518
Example at 50ft	50	0.708
Example at 75ft	75	0.453
Example at 100ft	100	0.330
Example at 125ft	125	0.258
-	-	-

<u>Impact Pile Driver (Typical)</u>		
Equipment:	Impact Pile Driver (Typical)	
Equipment PPV (in/sec):	0.644	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.644
Example at 50ft	50	0.300
Example at 75ft	75	0.192
Example at 100ft	100	0.140
Example at 125ft	125	0.110
-	-	-

<u>Vibratory Pile Driver (Upper Range)</u>		
Equipment:	Vibratory Pile Drive (Upper Range)	
Equipment PPV (in/sec):	0.734	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.734
Example at 50ft	50	0.342
Example at 75ft	75	0.219
Example at 100ft	100	0.160
Example at 125ft	125	0.125
-	-	-

Vibratory Pile Driver (Typical)		
Equipment:	Vibratory Pile Drive (Typical)	
Equipment PPV (in/sec):	0.17	
Reference Distance (ft):	25	
"n" value	1.1	
Receptor	Distance (ft)	Vibration Level (in/sec PPV)
Example at 25ft	25	0.170
Example at 50ft	50	0.079
Example at 75ft	75	0.051
Example at 100ft	100	0.037
Example at 125ft	125	0.029
-	-	-

APPENDIX H: PUBLIC SERVICES AGENCY LETTERS



EcoTierra
c o n s u l t i n g

July 31, 2023

Robert Espinosa, Interim Fire Chief
El Segundo Fire Department
314 Main Street
El Segundo, CA 90245

SENT VIA email: respinosa@elsegundo.org

RE: El Segundo Downtown Specific Plan Update — Request for Fire Service Information

Dear Chief Espinosa,

EcoTierra Consulting is preparing environmental documentation for the proposed El Segundo Downtown Specific Plan Update in accordance with the California Environmental Quality Act (CEQA). The City of El Segundo is the Lead Agency for the Project under the CEQA. Downtown El Segundo is located southwest of the interchange of Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of Imperial Highway (Refer to Figure 1, Regional Location Map and Figure 2, Project Plan Area).

The Project is an update to the adopted El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The Project would revise existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

The Project proposes amendments to the Land Use Element of the City's General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Project would also amend the City's zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The Project would allow for increases of up to 130,000 square feet of retail and restaurant uses, 200,000 square feet of office uses, 24,000 square feet of medical office uses, and 300 residential units.

In addition to land use and zoning changes, the Project would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would create potential changes to the number of travel lanes on those streets. The Project would potentially relocate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue (pending a future Truck Route Study); proposes the potential permanent closure of a portion of Richmond Street to vehicles,

Chief Espinosa

El Segundo Fire Department

July 31, 2023

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generally from Franklin Avenue to Grand Avenue, to create a permanent pedestrian only street for outdoor dining and gathering; and recommends maintaining the existing Class III bike route “sharrows” with alternative concepts for buffered bicycle lanes on Main Street and Grand Avenue. The Project would include pedestrian and transit improvements in the Project area including widened sidewalks and expanded outdoor seating and dining areas for area restaurants. Transit improvements could include bus stop enhancements such as additional transit shelters, lighting, and furnishings, and potentially provide expanded bus zones.

The Project would include modifications to parking standards and strategies and alternatives for on-street parking and potentially provide two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue. Lastly, the 2000 Specific Plan area was previously divided into six districts and the Specific Plan Update would adjust the Specific Plan area into four districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts.

Potential impacts to public services are an important element of our study, and our analysis strongly relies on your assistance in identifying potentially significant impacts to the El Segundo Fire Department (ESFD) that may occur as a result of the proposed Project, as well as any mitigation measure(s) that may reduce or eliminate these impacts. Any assistance that you can provide with addressing the following questions would be greatly appreciated.

1. Which fire station provides first-response service? Would any additional fire stations serve the Project? Please provide the applicable fire station numbers as well as the respective addresses?
2. What staffing levels, by type (e.g., Captains, Lieutenants, firefighters, paramedics, EMTs, HazMat-trained personnel) are currently maintained for these fire stations?
3. What are the existing equipment inventories (e.g., numbers of engines, trucks, rescue ambulances, etc.) at each fire station included in your response to question one?
4. What is the ESFD-desired response distance to a fire station? Does the distance from the Project site to each fire station meet the desired response distance standards of the ESFD?
5. What is/are the average response time(s) from each fire station included in your response to question one to the Project area? Does each response time meet the desired performance standards of the ESFD?

Chief Espinosa

El Segundo Fire Department

July 31, 2023

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6. Can you provide a breakdown of service calls by type (emergency or non-emergency, etc) for each station over any given time frame (month or year) as well as City averages for the same time frame?
7. What is the current fire protection service demand within the Project area?
8. Do standard criteria exist for evaluating acceptable fire protection service levels, and for assessing the significance of impacts to service levels imposed by implementation of the proposed Project?
9. What is considered an adequate level of service?
10. Would the proposed Project result in the need for expansion of existing or construction of new fire stations?
11. What are the fire flow and residual water pressure requirements for the proposed Project? Can you confirm whether existing water pressure and availability in the Project area would meet these requirements?
12. Please provide any recommendations or special concerns that may assist us in avoiding or reducing the occurrence of potential impacts to fire services associated with the proposed Project.

Thank you for your assistance, which will help us ensure that our analysis of the proposed Project's impacts on the ESD is accurate and complete. Should you have any questions, feel free to call me at (213) 235-4772. You may also reach me by email at jennifer@ecotierraconsulting.com. In order to ensure a timely completion of our analysis, please provide your response (via mail or email) no later than August 21, 2023.

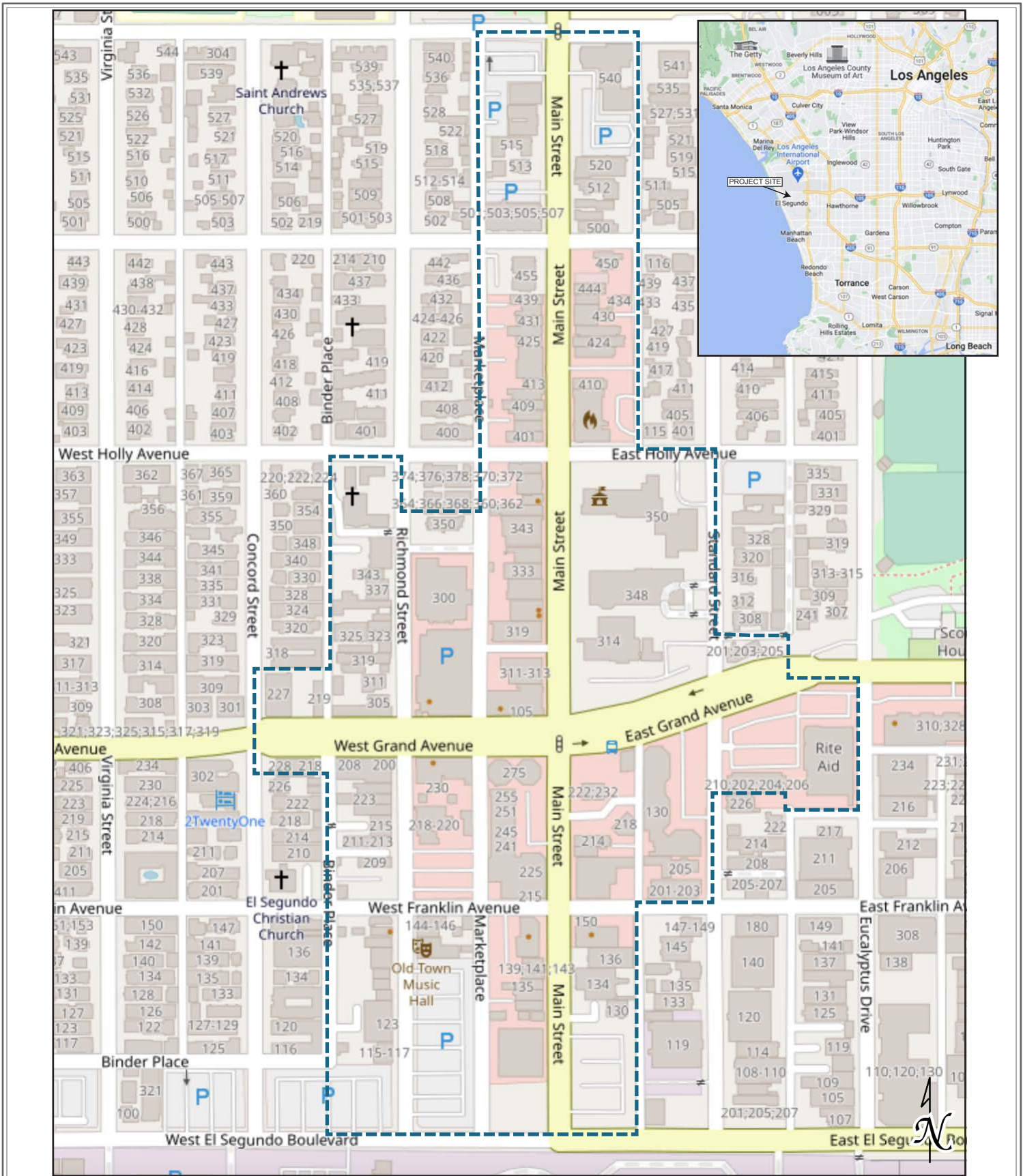
Sincerely,

EcoTierra Consulting



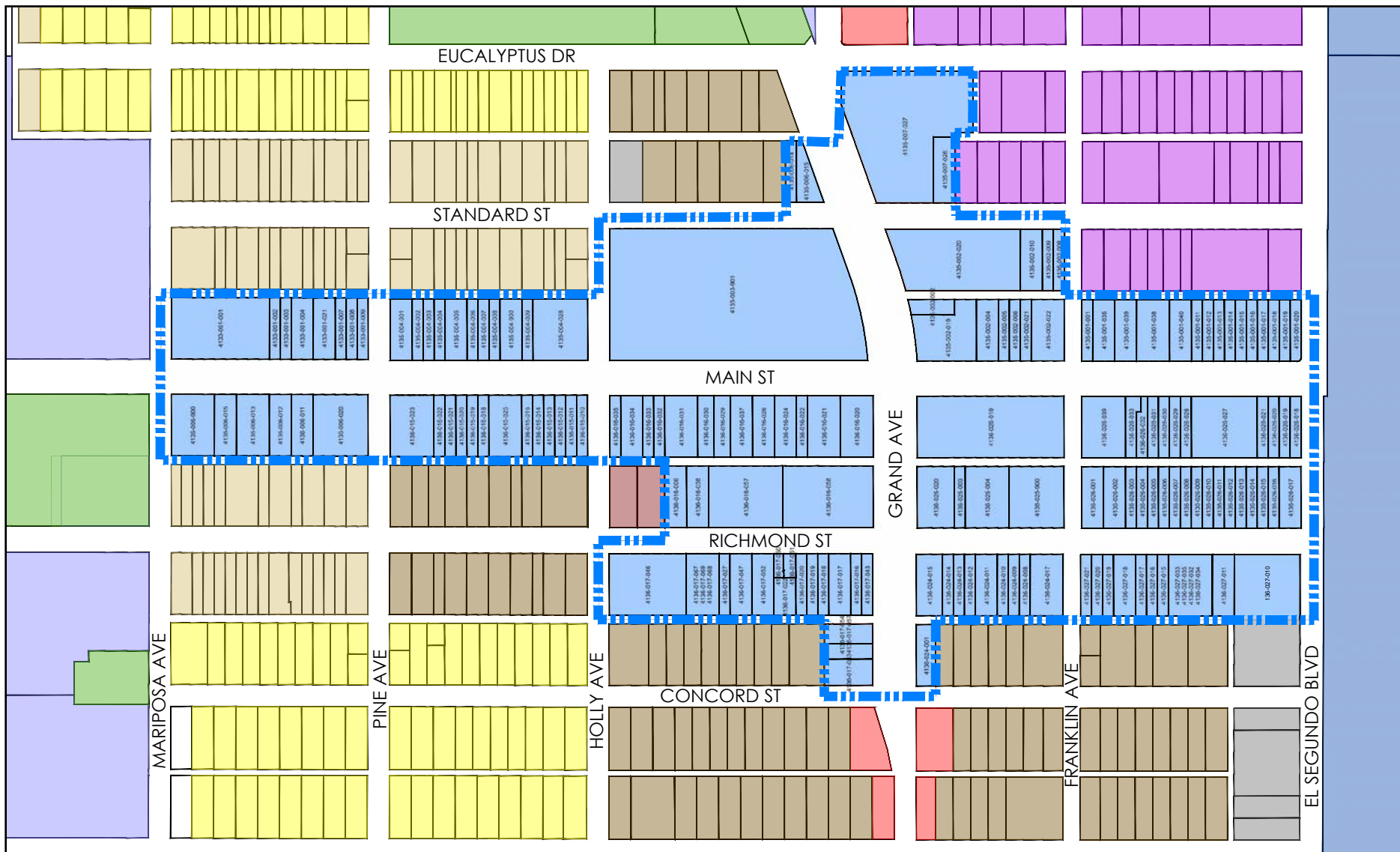
Jennifer Johnson
Project Manager

Enclosures














 Project Area
 Source: OpenStreetMaps and Google Maps, December 2022.

Figure 1
 Regional and Project Vicinity Map



LEGEND

- | | | |
|--|---|---|
|  Project Area Boundary |  Single-Family Residential |  Downtown Commercial |
|  Downtown Specific Plan |  Two-Family Residential |  General Commercial |
| |  Multi-Family Residential |  Public Facilities |
| |  Smoky Hollow |  Heavy Industrial |
| |  Parks |  Parking |



Source: RRM Design Group, August 2022.

Figure 2
Project Area Plan

Subject: RE: Eco Tierra Survey Answers
Date: Tuesday, August 15, 2023 at 5:41:08 PM Pacific Daylight Time
From: Snow, Casey
To: Jennifer Johnson
Attachments: image001.png, image002.png

Hi, Jennifer. I received the following when I requested assistance with question #11 on your survey:

“The Water Division could provide flow availability information for specific locations for the sizing of a fire system and can only provide the water pressures provided by our water distribution system.

What is being requested in item #11 would be determined throughout the planning/development process based on a number of factors.”

Casey Snow | Battalion Chief | “C” Platoon
City of El Segundo | Fire Department
314 Main Street • El Segundo, CA 90245
310-524-2228 Office 424-405-1425 Cell |
csnow@elsegundo.org | www.elsegundofd.org

From: Jennifer Johnson <jennifer@ecotierraconsulting.com>
Sent: Wednesday, August 9, 2023 3:52 PM
To: Snow, Casey <csnow@elsegundo.org>
Subject: Re: Eco Tierra Survey Answers

Thank you!!!

Jennifer Johnson | Project Manager
EcoTierra Consulting

633 W 5th Street, 26th Floor
Los Angeles, CA 90071
(213) 235-4770 (main)
(213) 235-4772 (direct)

jennifer@ecotierraconsulting.com

From: Snow, Casey <csnow@elsegundo.org>
Date: Wednesday, August 9, 2023 at 2:09 PM
To: Jennifer Johnson <jennifer@ecotierraconsulting.com>
Subject: Eco Tierra Survey Answers

Hi, Jennifer. Please see the attached answers to your questions regarding the Downtown Plan in El Segundo. I will get back to you regarding details to #11.

Thank you

Casey Snow | Battalion Chief | "C" Platoon
City of El Segundo | Fire Department
314 Main Street • El Segundo, CA 90245
310-524-2228 Office 424-405-1425 Cell |
csnow@elsegundo.org | www.elsegundofd.org

- 1) ESFD Station 1 (314 main Street ES) will be the closest station to the area, and ESFD Station 2 (2261 East Mariposa) will be the next closest station to the area.
- 2) Station 1 staffing level: 1 Battalion Chief, 1 captain, 1Engineer, 1 Firefighter, and 2 Firefighter Paramedics. Station 2 staffing level: 2 captains, 2 Engineers, 2 Firefighters, and 2 Firefighter paramedics.
- 3) Station 1 equipment: 1 Battalion Chief vehicle, 1 Fire engine, 1 Ambulance. Station 2 equipment: 1 Fire engine, 1 Ladder Truck, 1 Ambulance, and Urban Search and Rescue Vehicle.
- 4) Station 1 is in the area of the project, and the response distance meets the standard.
- 5) This will be answered by Paul Rottenberg from the company called Fire Stats. I introduced you via email.
- 6) Station 1 responded to 1,655 calls for service in 2022, and Station 2 responded to 1,422 calls for service in 2022. The following is a count of ESFD calls for service for 2022:

MAJOR INCIDENT TYPE	# INCIDENTS	% of TOTAL
Fires	79	2.57%
Overpressure rupture, explosion, overheat - no fire	6	0.2%
Rescue & Emergency Medical Service	1960	63.7%
Hazardous Condition (No Fire)	140	4.55%
Service Call	150	4.87%
Good Intent Call	363	11.8%
False Alarm & False Call	350	11.37%
Special Incident Type	29	0.94%
TOTAL	3077	100%

- 7) The demand includes water supply for hydrants, standpipes, and sprinklers, fire access, fire and smoke detection, and kitchen extinguishing systems.
- 8) Standard criteria includes the California Fire Code, California Building Code, El Segundo Municipal Code, etc.
- 9) The response times for the area will be adequate. Station 1 is location inside the proposed plan area.
- 10) No.
- 11) We will work on the fire flow and residual pressure requirements for the proposed project; however, our existing water pressure should meet the requirements.
- 12) Fire access on streets (street closures, dining area closures, etc.), height of banners and arches to meet minimum 15 ft clearance, and other Code requirements will be of concern and will reduce impact to the services we provide.



July 31, 2023

Jaime Bermudez, Chief of Police
El Segundo Police Department
348 Main Street
El Segundo, CA 90245

SENT VIA email: jbermudez@elsegundo.org

RE: El Segundo Downtown Specific Plan Update — Request for Police Service Information

Dear Chief Bermudez:

EcoTierra Consulting is preparing environmental documentation for the proposed El Segundo Downtown Specific Plan Update in accordance with the California Environmental Quality Act (CEQA). The City of El Segundo is the Lead Agency for the Project under the CEQA. Downtown El Segundo is located southwest of the interchange of Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of Imperial Highway (Refer to Figure 1, Regional Location Map and Figure 2, Project Plan Area).

The Project is an update to the adopted El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The Project would revise existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

The Project proposes amendments to the Land Use Element of the City's General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Project would also amend the City's zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The Project would allow for increases of up to 130,000 square feet of retail and restaurant uses, 200,000 square feet of office uses, 24,000 square feet of medical office uses, and 300 residential units.

In addition to land use and zoning changes, the Project would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would create potential changes to the number of travel lanes on those streets. The Project would potentially relocate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue (pending a future Truck Route Study); proposes the potential permanent closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue, to create a permanent pedestrian only street for outdoor dining and gathering; and recommends maintaining the existing Class III bike route “sharrows” with alternative concepts for buffered bicycle lanes on Main Street and Grand Avenue. The Project would include pedestrian and transit improvements in the Project area including widened sidewalks and expanded outdoor seating and dining areas for area restaurants. Transit improvements could include bus stop enhancements such as additional transit shelters, lighting, and furnishings, and potentially provide expanded bus zones.

The Project would include modifications to parking standards and strategies and alternatives for on-street parking and potentially provide two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue. Lastly, the 2000 Specific Plan area was previously divided into six districts and the Specific Plan Update would adjust the Specific Plan area into four districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts.

Potential impacts to public services are an important element of our study, and our analysis strongly relies on your assistance in identifying potentially significant impacts to police services that may occur as a result of the project, as well as any mitigation measure(s) that may reduce or eliminate these impacts. Any assistance that you can provide with addressing the following questions would be greatly appreciated.

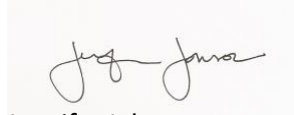
1. Which police station provides first-response service to the project area? Would any additional police stations serve the project? Please provide the applicable police station numbers and/or names as well as the respective addresses.
2. What staffing levels by type (e.g., Captains, Lieutenants, officers, and unsworn personnel) are currently maintained for the police station(s) included in your response to question one?
3. What is the current officer-to-citizen ratio?

4. What, if any, is the ESPD-desired officer-to-citizen ratio? Does the current officer-to-citizen ratio meet the desired service ratio standard of the ESPD?
5. What is the average response time (for emergency and non-emergency calls) in the project's reporting district/patrol route and Citywide? Does each response time meet the desired performance standards?
6. What is the current police protection service demand within the project area?
7. Do standard criteria exist for evaluating acceptable police protection service levels, and for assessing the significance of impacts to service levels imposed by implementation of the Project?
8. What is considered an adequate level of service?
9. Would the Project result in the need for expansion of existing or construction of new police stations?
10. Please provide any recommendations or special concerns that may assist us in avoiding or reducing the occurrence of potential impacts to police services associated with the Project.

Thank you for your assistance, which will help us ensure that our analysis of the proposed Project's impacts on the ESPD is accurate and complete. Should you have any questions, feel free to call me at (213) 235-4772. You may also reach me by email at jennifer@ecotierraconsulting.com. In order to ensure a timely completion of our analysis, please provide your response (via mail or email) no later than August 21, 2023.

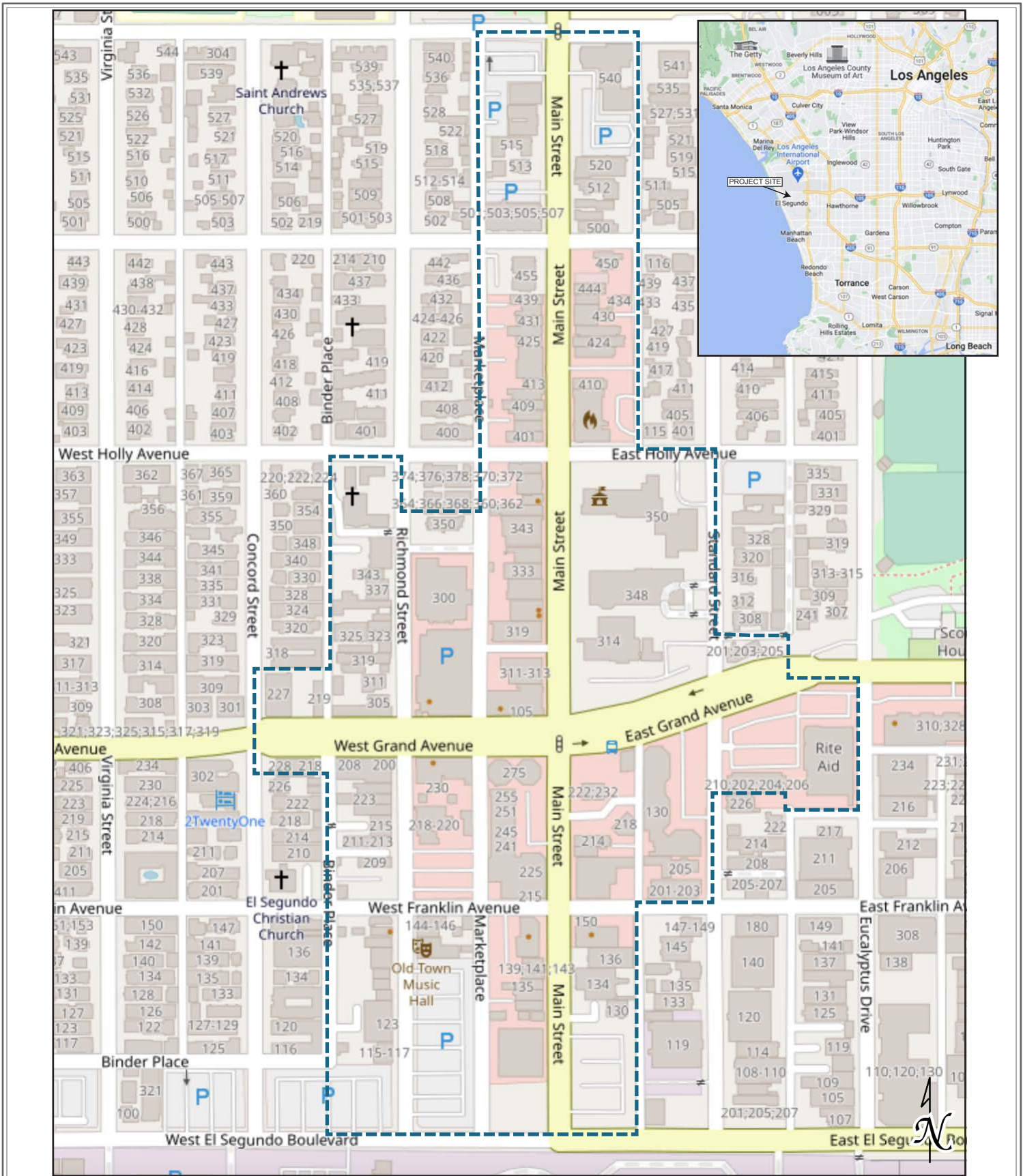
Sincerely

EcoTierra Consulting, Inc.



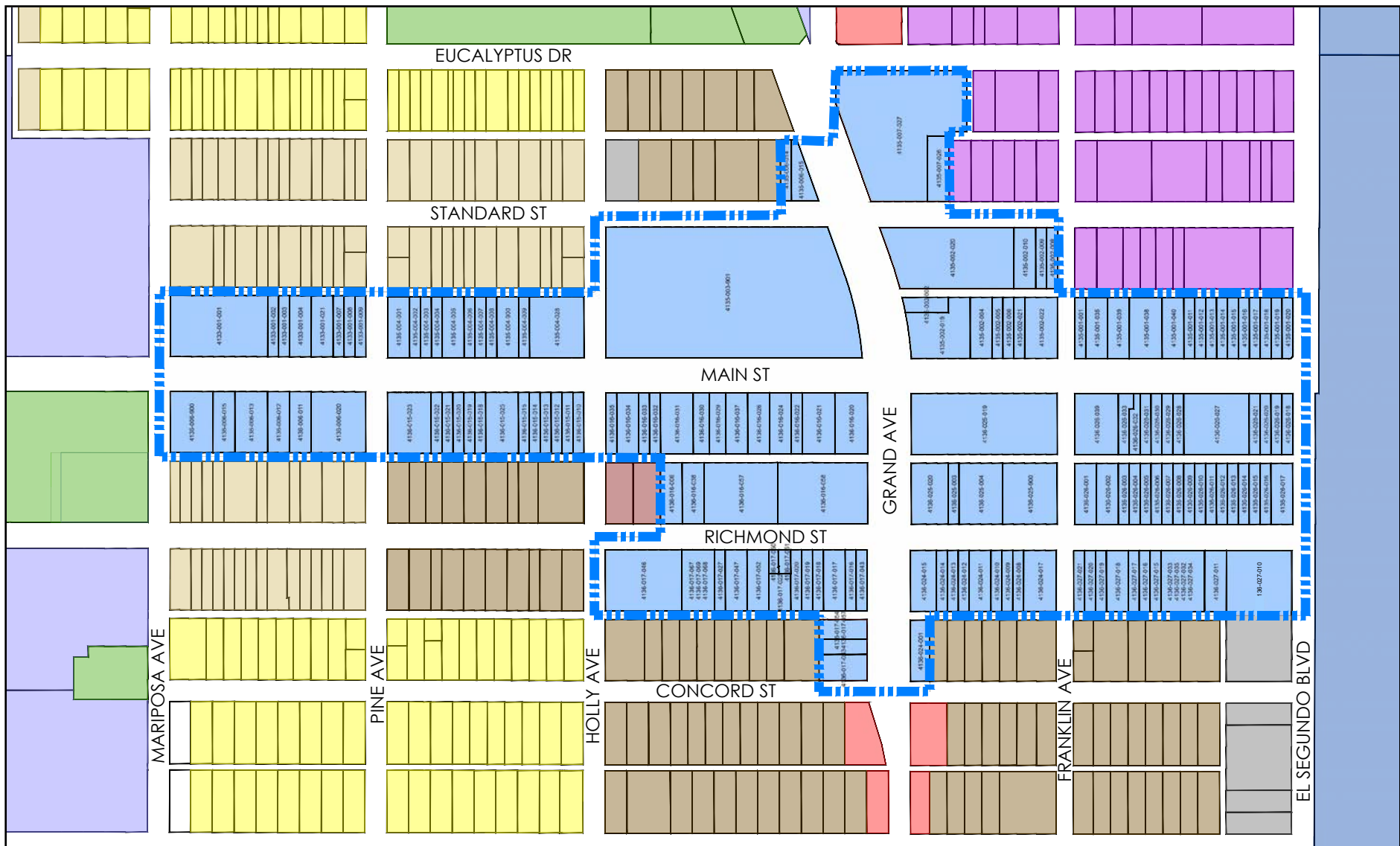
Jennifer Johnson
Project Manager

Enclosures














 Project Area
 Source: OpenStreetMaps and Google Maps, December 2022.

Figure 1
 Regional and Project Vicinity Map



LEGEND

- | | | |
|--|---|---|
|  Project Area Boundary |  Single-Family Residential |  Downtown Commercial |
|  Downtown Specific Plan |  Two-Family Residential |  General Commercial |
| |  Multi-Family Residential |  Public Facilities |
| |  Smoky Hollow |  Heavy Industrial |
| |  Parks |  Parking |



Source: RRM Design Group, August 2022.

Figure 2
Project Area Plan

- 1) Which police station provides first-response service to the project area? Would additional police stations serve the project? Please provide the applicable police station numbers and/or names as well as the respective addresses.

The El Segundo Police Department: 348 Main Street, El Segundo, CA 90245.

- No other police stations would serve the project.
- General telephone number 310-524-2200.

2. What staffing levels by type (e.g., Captains, Lieutenants, officers, and unsworn personnel) are currently maintained for the police station included to your response to question one?

Current Police Department Staffing: 87

- Chief: 1
- Captains: 2
- Lieutenants: 4
- Sergeants: 11
- Officers: 39
- Non-sworn personnel: 31

3. What is the current officer-to-citizen ratio?

- 1/292 (US Census as of July 2022 – population 16,622)

4. What, if any, is the ESPD-desired officer-to-citizen ratio? Does the current officer-to citizen ratio meet the desired service ratio standard of the ESPD.

There are currently 57 sworn officers at ESPD. The desired level is 72 sworn officers, so therefore the desired officer-to-citizen ratio is 231.

5. What is the average response time (for emergency and non-emergency calls) in the project's reporting district/patrol route and Citywide? Does each response time meet the desired performance standards?

Average response time YTD:

- City-wide
 - i. Emergency: 03:22
 - ii. Other Calls for Service: 04:53

Does each response time meet the desired performance standards? Yes

6. What is the current police protection service demand within the project area?

We do not have that information, but if the project is implemented service demand will definitely increase, especially if 300 additional residential units, including retail and restaurant locations, are added to the project area.

7. Do standard criteria exist for evaluating acceptable police protection service levels, and for assessing the significance of impacts to service levels imposed by implementation of the project?

There are various criteria used in assessing acceptable police protection service levels. A study would need to be done to determine the increase of expected level of calls for service and crime in the project area.

8. What is considered an adequate level of service?

Quick police response times to service calls, and the amount of time an officer spends in any given area during their free time. We look to determine whether an officer spends an appropriate level of time in their patrol beat.

9. Would the project result in the need for expansion of existing or construction of new police stations?

It's difficult to determine that at this point, since it is unknown the impact it will have on police services.

10. Please provide any recommendations or special concerns that may assist us in avoiding or reducing the occurrence of potential impacts to police services associated with the project.

Please continue to consult with our police management team with anything related to the impact to police services concerning this project.



July 31, 2023

Dr. Melissa Moore, Superintendent
El Segundo Unified School District
641 Sheldon Street
El Segundo, CA 90245

SENT VIA email: mmoore@esud.net

RE: El Segundo Downtown Specific Plan Update — Request for School Service Information

Dear Dr. Moore-

EcoTierra Consulting is preparing environmental documentation for the proposed El Segundo Downtown Specific Plan Update in accordance with the California Environmental Quality Act (CEQA). The City of El Segundo is the Lead Agency for the Project under the CEQA. Downtown El Segundo is located southwest of the interchange of Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of Imperial Highway (Refer to Figure 1, Regional Location Map and Figure 2, Project Plan Area).

The Project is an update to the adopted El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The Project would revise existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels, and include mobility enhancements. The Project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

The Project proposes amendments to the Land Use Element of the City's General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The Project would also amend the City's zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The Project would allow for increases of up to 130,000 square feet of retail and restaurant uses, 200,000 square feet of office uses, 24,000 square feet of medical office uses, and 300 residential units.

In addition to land use and zoning changes, the Project would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would create potential changes to the number of travel lanes on those streets. The Project would potentially relocate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue (pending a future Truck Route Study); proposes the potential permanent closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue, to create a permanent pedestrian only street for outdoor dining and gathering; and recommends maintaining the existing Class III bike route “sharrows” with alternative concepts for buffered bicycle lanes on Main Street and Grand Avenue. The Project would include pedestrian and transit improvements in the Project area including widened sidewalks and expanded outdoor seating and dining areas for area restaurants. Transit improvements could include bus stop enhancements such as additional transit shelters, lighting, and furnishings, and potentially provide expanded bus zones.

The Project would include modifications to parking standards and strategies and alternatives for on-street parking and potentially provide two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond Street and Franklin Avenue. Lastly, the 2000 Specific Plan area was previously divided into six districts and the Specific Plan Update would adjust the Specific Plan area into four districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts.

Potential impacts to public services are an important element of our study, and our analysis strongly relies on your assistance in identifying potentially significant impacts to the school services that may occur as a result of the Project, as well as any mitigation measure(s) that may reduce or eliminate these impacts. Any assistance that you can provide with addressing the following questions would be greatly appreciated.

1. Please provide a list of schools that would serve the Project.
2. What are the current enrollments and total student capacities of each school included in your response to question one?
3. Are there any improvements or additions planned for schools that serve the Project area?
4. Are there plans to build any new schools that would serve the Project?

Dr. Melissa Moore
El Segundo Unified School District
July 31, 2023
Page 3

Thank you for your assistance, which will help us ensure that our analysis of the proposed Project's impacts on the ESUSD is accurate and complete. Should you have any questions, feel free to call me at (213) 235-4772. You may also reach me by email at jennifer@ecotierraconsulting.com. In order to ensure a timely completion of our analysis, please provide your response (via mail or email) no later than August 21, 2023.

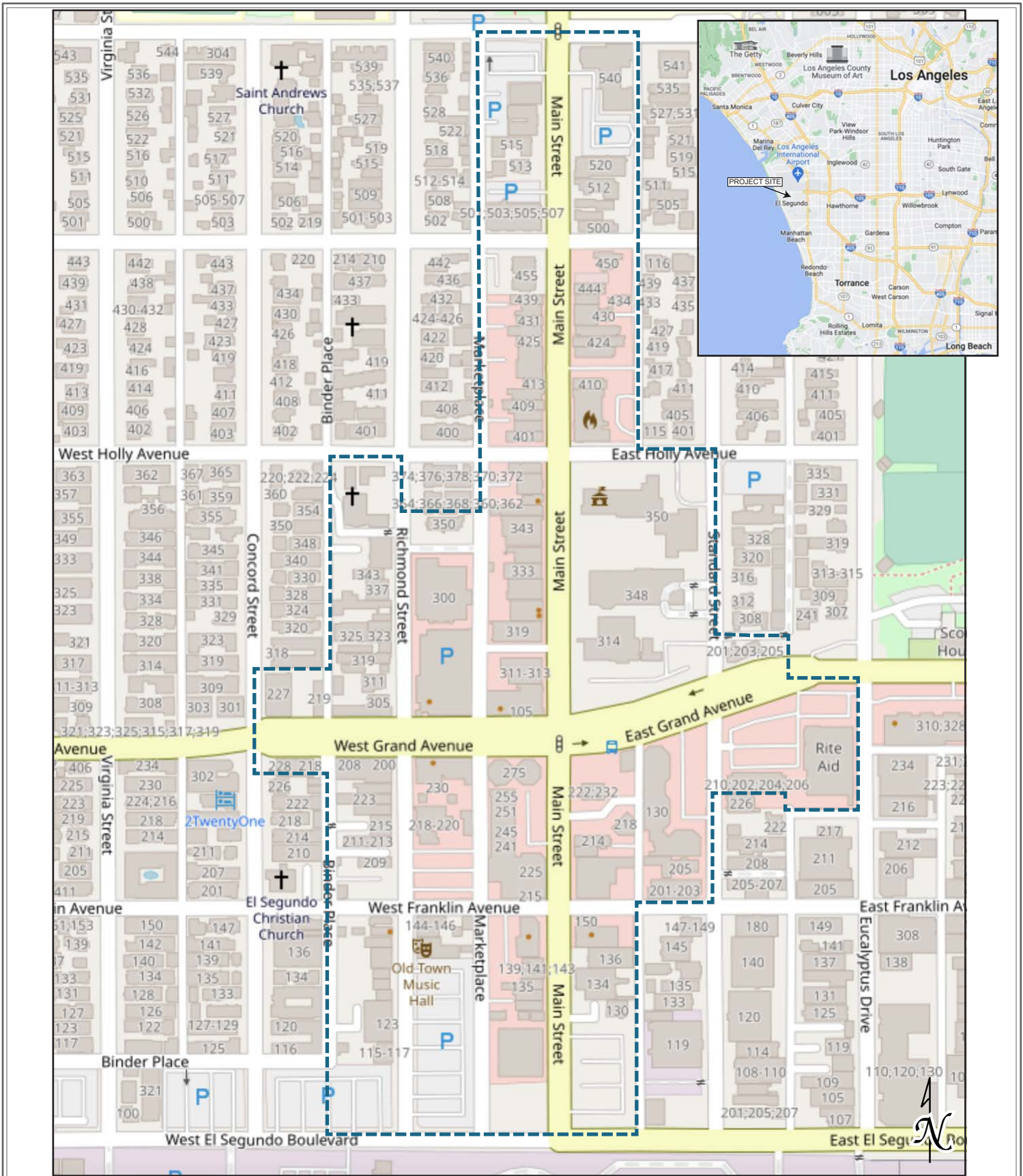
Sincerely,

EcoTierra Consulting, Inc.

A handwritten signature in black ink, appearing to read "Jen Johnson", is placed on a light gray rectangular background.

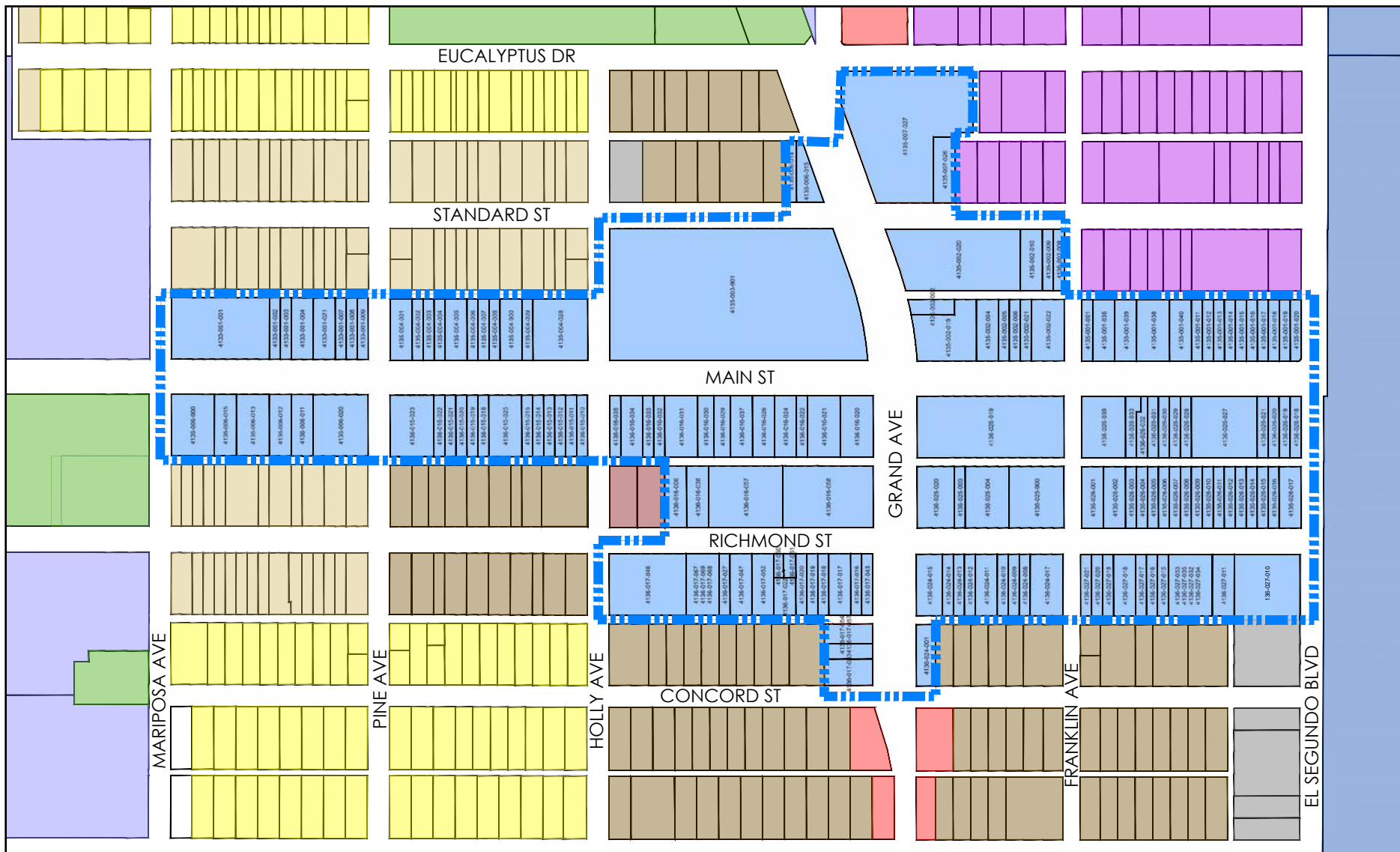
Jennifer Johnson
Project Manager

Enclosures



Project Area
 Source: OpenStreetMaps and Google Maps, December 2022.

Figure 1
 Regional and Project Vicinity Map



LEGEND

- Project Area Boundary
- Single-Family Residential
- Two-Family Residential
- Multi-Family Residential
- Smoky Hollow
- Parks
- Downtown Commercial
- General Commercial
- Public Facilities
- Heavy Industrial
- Parking



Source: RRM Design Group, August 2022.

Figure 2
Project Area Plan

Subject: Re: El Segundo Downtown Specific Plan Update — Request for School Service Information
Date: Monday, August 7, 2023 at 8:52:23 AM Pacific Daylight Time
From: Kimberlie Linz
To: Melissa Moore
CC: Jennifer Johnson, Jenny Mailhot

Hi Jennifer,

Please see responses below to your questions:

1/2. Schools that serve the El Segundo area include:
Richmond Street Elementary School enrollment 591
Center Street School enrollment 795
El Segundo Middle School enrollment 822
El Segundo High School enrollment 1296

All schools are currently at capacity

3.

- The middle school recently added a gymnasium and two PE classrooms. There was a net addition of two classrooms to the campus, but it will still be at capacity this year.
- Richmond Street School is adding a six classroom building that will net three classrooms for the campus. That building is slated to open in January of 2024.
- The high school is adding a new band room and community based instruction room slated to open in the summer of 2024. There will be a net addition of two classrooms, but the campus will still be at full capacity after opening the building.

4. There are no plans to build any new schools.

Please let me know if you have any other questions.

Thank you,

Kim

Kim Linz
Chief Business Official
El Segundo Unified School District
klinz@esUSD.net
(310)615-2650

This communication (and any associated attachments) is intended to be communicated to the addressee only. If you are not the addressee or if you have doubts whether you are the addressee, you may not disseminate, send, retransmit, distribute, print, publish or otherwise republish this communication (and any associated attachments) -- all such acts are strictly prohibited. The sender of this communication (and any associated attachments) reserves all privileges, copyrights, trade secrets and all other intellectual property right, title and interest in an to the contents of this

communication (and any associated attachments). If you have received this communication in error, please notify the sender immediately and then delete this communication from your computer. The sender further reserves the right to monitor its communications.

On Thu, Aug 3, 2023 at 8:21 AM Melissa Moore <mmoore@esusd.net> wrote:

Good morning Jennifer,

My CBO and I are out of the office this week and Kim Linz will be handling this request when she returns to the office next week. What is the timeline regarding when you need it completed by?

Melissa Moore

Sent from my iPhone

On Jul 31, 2023, at 10:24 AM, Jennifer Johnson <jennifer@ecotierraconsulting.com> wrote:

Dear Dr. Moore-

EcoTierra Consulting is preparing an EIR for the El Segundo Downtown Specific Plan Update. I have attached a request for service information. Thank you in advance for your time in responding to this request. Please let me know if you have any questions.

Jennifer Johnson | Project Manager

EcoTierra Consulting

633 W 5th Street, 26th Floor

Los Angeles, CA 90071

(213) 235-4770 (main)

(213) 235-4772 (direct)

jennifer@ecotierraconsulting.com

www.ecotierraconsulting.com

APPENDIX I: TRANSPORTATION AND TRAFFIC

APPENDIX I.1: TRANSPORTATION ASSESSMENT REPORT

El Segundo Downtown Specific Plan Update

Transportation Assessment

Prepared for:

RRM Design Group, EcoTierra, and the City of El
Segundo

January 2024

FEHR  PEERS

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List of Acronyms

ABM	Activity-based model
ADA	Americans with Disabilities Act
BMP	.....	Bike Master Plan
CA	.....	California
CEQA	.....	California Environmental Quality Act
DSP	.....	Downtown Specific Plan
DU	.....	Dwelling Unit
EIR	.....	Environmental Impact Report
ESFD	.....	El Segundo Fire Department
ESPD	.....	El Segundo Police Department
GHG	.....	Greenhouse Gas
KSF	.....	Thousand Square Feet
LA	.....	Los Angeles
LAX	.....	Los Angeles International Airport
MUTCD	.....	(California) Manual on Uniform Traffic Control
OPR	.....	(California) Governor's Office of Planning Research
PCH	.....	Pacific Coast Highway (CA-1)
PPOP	.....	Plans, Programs, Ordinances and Policies
RTP/SCS	.....	Connect SoCal Regional Transportation Plan
SB 743	.....	California Senate Bill 743
SCAG	.....	Southern California Association of Governments
SED	.....	Socioeconomic Data
TA	.....	Transportation Assessment
TAZ	.....	Transportation Analysis Zone
TDM	.....	Transportation Demand Management
VMT	.....	Vehicle Miles Traveled
VPD	.....	Vehicles per Day

1. Introduction

This report documents the assumptions, methodologies, and findings of a transportation analysis (TA) conducted by Fehr & Peers to address the potential transportation impacts of the El Segundo Downtown Specific Plan Update (Project) in the City of El Segundo, California. The boundary of the Downtown Specific Plan Area (Project Area) is shown in **Figure 1-1**. The Project is proposed to enable the buildout of the Downtown Specific Plan area according to the land uses described in **Table 1-1**. The Project is also proposed to include the conceptual mobility enhancements described in Chapter 3 of the Downtown Specific Plan Update, Multimodal Mobility.

This TA was conducted to support the analysis of transportation within an Environmental Impact Report (EIR) under the California Environmental Quality Act (CEQA) being prepared for the Project, and to otherwise meet City of El Segundo requirements in accordance with the City of El Segundo SB 743 Implementation Guidelines.¹

1.1 Project Description

The Project Area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo, which is approximately 20 miles southwest from downtown Los Angeles. The Project Area is located southwest of the interchange of the Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. The Interstate 105 Freeway (I-105) is north of the Project Area, immediately north of Imperial Highway. The Project Area is bounded by Mariposa Avenue to the north and El Segundo Boulevard to the south. Los Angeles International Airport (LAX) is located to the north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east; the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west. **Figure 1-1** illustrates the Project Area.

The Project proposes the following net-new land uses in the Project Area, through 2040:

- Retail and Restaurant: 130,000 square feet
- Office: 200,000 square feet
- Medical Office: 24,000 square feet
- Residential Units: 300 units

The existing, net new, and proposed buildout land use quantities through 2040 are described in **Table 1-1**.

¹ City of El Segundo, *SB 743 Implementation Guidelines*, May 2022, adopted September 2022.



Table 1-1: Project Land Uses

Land Use	Units ¹	Net New (Through 2040)
Restaurant²	KSF	35.21
Grocery²	KSF	15.92
General Retail²	KSF	51.51
Hardware/Auto Parts²	KSF	3.00
Other Services²	KSF	24.36
General Office	KSF	200.00
Medical Office	KSF	24.00
Residential	DU	300

¹ KSF = Thousand Square Feet, DU = Dwelling Unit

²The DSP Project Description describes a combined total of 130 KSF for retail and restaurant. Breakdown of specific uses was estimated based on Table 1a and 1b in Real Estate Demand Analysis for El Segundo DTSP Update (2022) report produced by The Natelson Dale Group, Inc (TNDG). TNDG's report is attached to this TA as Appendix E.

The Project also proposes the following conceptual transportation network enhancements, as described in Chapter 3 of the Downtown Specific Plan Update, Multimodal Mobility (those listed as Area-wide are proposed at various locations throughout the Project Area where necessary):

- Pedestrian crossing enhancements at twelve (12) locations
- Area-wide sidewalk ADA-compliant curb ramp enhancements
- Bicycle mobility enhancements on two (2) roadway segments
- Area-wide bicycle accommodation and wayfinding enhancements
- Bus stop enhancements at six (6) existing bus stops
- Signal operation enhancements at two (2) signalized intersections
- Streetscape enhancements on two (2) roadway segments
- Area-wide intersection control improvements (signage and striping)
- In-road bollard receptacles for temporary street closures at two (2) locations
- Area-wide on-street parking striping enhancements
- Area-wide off-street parking optimization enhancements

The conceptual enhancements listed above are further described in **Section 3.3** of this TA. Chapter 3 of the Downtown Specific Plan Update, Multimodal Mobility, also describes “alternative” transportation



network enhancements that could be pursued by the City instead of the “preferred” enhancements. Because these alternative enhancements are not preferred design features of the Project, they are not evaluated for impacts in this TA.

1.2 Transportation Assessment Scope

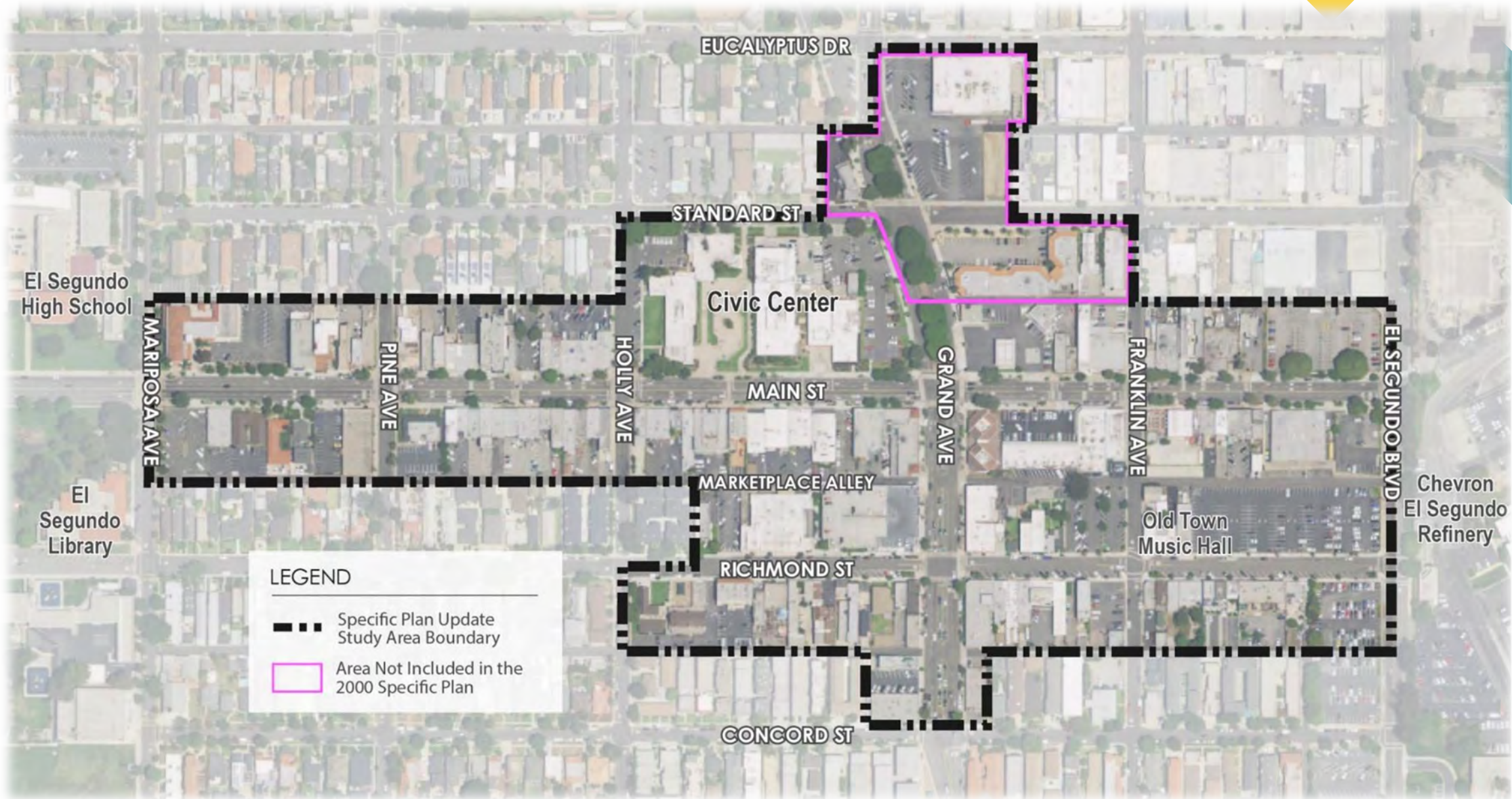
The scope of work for this TA was determined in consultation with the City of El Segundo and is in accordance with the City’s VMT thresholds of significance adopted in September 2022. The base assumptions and technical methodologies were discussed with the City of El Segundo as part of the TA approach.

The SB 743 Implementation Guidelines establishes an updated set of guidelines, methods, and impact criteria for CEQA considerations that focus on vehicle miles traveled (VMT). The California Environmental Quality Act (CEQA) Appendix G checklist poses questions 1, 3, and 4 in the below list. This TA investigates the following questions in determining the potential for transportation-related impacts:



1. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities? (*Plans, Programs, Ordinances and Policies (PPOP) Review*)
2. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b), (based on methodology at thresholds outlines in the City of El Segundo SB 743 Implementation Guidelines)? (*Vehicle Miles Traveled Analysis*)
3. Would the project substantially increase hazards due to a geometric design feature or incompatible use? (*Geometric Hazards Review*)
4. Would the project result in inadequate emergency access? (*Inadequate Emergency Access Review*)



Specific Plan Update Boundary



LEGEND

-  Specific Plan Update Study Area Boundary
-  Area Not Included in the 2000 Specific Plan

1.3 Organization of this Transportation Assessment Report

This TA is divided into four chapters, including this introduction, **Chapter 1**. **Chapter 2** describes the environmental setting and the existing and cumulative conditions of the transportation system in the study area, including an inventory of the streets, freeways, bicycle and pedestrian networks, and transit service. The required CEQA analyses are summarized in **Chapter 3**, and include a review of the City’s plans, programs, ordinances, and policies, a VMT analysis, a geometric design hazards evaluation, and emergency access evaluation. **Chapter 4** contains the TA summary and conclusions.

Appendices to this TA include details of the technical analysis, as follows:

- **Appendix A - Preferred Roadway Sections** includes illustrations of the preferred conceptual roadway infrastructure enhancements.
- **Appendix B - PPOP Review** provides a detailed review of the Project’s consistency with relevant plans, programs, ordinances, and policies.
- **Appendix C – SED TAZ Inputs for Activity-Based Model (ABM)** contains the socio-economic data (SED) inputs for the SCAG RTP/SCS Activity-Based Model (provided by SCAG)
- **Appendix D – Project Area Existing Parcel Data** contains the existing parcel data for the Project Area (provided by the City)
- **Appendix E – The Natelson Dale Group, Inc. (TNDG) Real Estate Market Report** contains the “Real Estate Real Estate Market Overview and Long-range Demand Projections for El Segundo Downtown Specific Plan Update” document produced by TNDG in April 2022



2. Environmental Setting

2.1 Existing Conditions

Study Area

The approximately 43.8-acre Project Area is currently regulated by the 2000 City of El Segundo Downtown Specific Plan, a regulatory document which the Project would replace. Existing land uses within the Project Area include retail, restaurant, office, and residential. The existing land use parcel data for the Project Area is attached to this report as **Appendix D**. The Project Area also includes various civic uses, such as El Segundo City Hall, the El Segundo Police Department (ESPD) headquarters, and El Segundo Fire Department (ESFD) Station #1. Because the Project Area defines specific boundaries within which Project land use buildout and conceptual roadway enhancements may occur, the Study Area in this analysis is defined as the Project Area, as shown in **Figure 1-1**. Thus, the terms Project Area and Study Area are used interchangeably in this TA.

Existing Street System

Major streets serving the Project Area include El Segundo Boulevard, Grand Avenue, and Mariposa Avenue in the east-west direction and Main Street in the north-south direction. Regional access to the Project Site is provided by I-105 (Glenn Anderson Freeway), I-405 (San Diego Freeway) and CA-1 (Pacific Coast Highway/Sepulveda Blvd), with the nearest interchange approximately 1 mile to the northeast (I-105). Local access to the Project Area is provided by several local streets and avenues, listed below. Per the *El Segundo Circulation Element*², the following list describes the designation of the major streets located within or directly adjacent to the Project Area:

- El Segundo Boulevard – Secondary Arterial (east of Main Street), 4-Lane Collector (west of Main Street)
- Grand Avenue – Secondary Arterial
- Mariposa Avenue – 2-Lane Collector (east of Main Street), Local Street (west of Main Street)
- Main Street – Secondary Arterial (south of Grand Avenue), 4-Lane Collector (north of Grand Avenue)

The *City of El Segundo Circulation Element*, defines the following street classifications:

Major Arterials

- Major arterials function to connect traffic from collectors to the major freeway system as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These facilities handle inter-city and intra-city vehicular trips in the magnitude of 40,000 to 75,000 vehicles per

² City of El Segundo, *City of El Segundo General Plan Circulation Element*, September 2004



day (VPD). They should be planned for eight lanes of through traffic. In the majority of cases in El Segundo, curb parking will be prohibited during peak periods. Bicycle traffic would travel with vehicular flow or be separated by a path behind the curb. Raised medians can be used to separate opposing flows of vehicular traffic as necessary. Access points, (i.e., driveways and minor intersecting streets) should be minimized.

- Separate left-turn lanes at major signalized intersections would be mandatory with double left-turn lanes the rule rather than the exception. Separate right-turn lanes which also serve as bus loading areas would be considered at locations indicating high turn volumes. At some intersections up to three left turn and up to two right turn lanes may be provided, if needed, and if acquisition of additional right-of-way is practical.

Secondary Arterials

- Secondary arterials are similar to major arterials in function. They connect traffic from collectors to the major freeway system. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These streets handle intra-city trips in the magnitude of 25,000 to 55,000 VPD and are not as continuous in length as major arterials. At least six through lanes should be provided to handle these needs along with single or double left-turn lanes (the latter preferably) at major signalized intersections. Curb parking would be prohibited during peak periods. Bicycle traffic would have to use paths behind the curb, separate bicycle lanes, or travel in the street with autos, trucks and buses.

Collector Streets

- The collector street is intended to serve as an intermediate route to handle traffic between local streets and arterials. In addition, collector streets provide access to abutting property. Collector streets are anticipated to carry traffic volumes between 15,000 to 40,000 VPD and serve important internal functions within the community. A collector street may have one through lane per direction; but more realistically, it should have a minimum of two through lanes (at least during peak periods). In some cases, a 4-lane collector may have a median divider. Curb parking can be accommodated if abutting property owners have insufficient off-street parking. The function of the collector, however, is to "collect" vehicles from the local street system and transport them to the arterial system as efficiently as possible.
- Signalization of collector/local street intersections should be timed to permit the majority of the traffic flow on the collector while allowing local street access. Restriction of free flow along collectors due to unwarranted stop controls should be discouraged.

Local Streets

- Local streets principally provide vehicular, pedestrian, and bicycle access to property abutting the public right-of-way. Cross sections of local streets vary, depending on the abutting land uses, parking requirements, street trees, and other considerations. Where both sides of the street are served equally in residential areas, the common right-of-way width for a local street is 60 feet with a 36-foot pavement width.



- In multi-family areas where there is continuous parking throughout the day, a minimum of 40 feet of pavement may be required to provide room for two moving lanes of traffic in addition to street parking on both sides. In commercial and industrial areas, a minimum pavement width of 40 feet is considered necessary. In industrial areas, consideration of the predominant type of trucking, and whether or not maneuvering of trailers must be provided, may require a pavement width of more than 44 feet.
- When pavement widths exceed 40 feet on local streets, rights-of-way should be increased above 60 feet. Each parkway width should be 12 feet, including landscaped area and sidewalk. Sidewalk width should be 4 feet in residential areas and 5 feet in commercial or industrial areas.
- The overall system design of local streets can greatly affect traffic. Unduly long streets build up traffic volumes and act as collectors. Cross streets and intersections with acute angles are likely to contribute to accidents. Good practice precludes carrying local streets into arterials since such intersections create unnecessary friction points and cause related congestion on the arterials. A far better approach is to bring local streets into collectors which then feed into arterials.

Described below are the primary freeway and roadways that provide regional and local access to the Project Area.

Freeways

- **I-105 (Glenn Anderson Freeway)** is oriented in the east-west direction located north of the Project. Near the Project Area, I-105 provides three lanes in each direction. I-105 terminates onto Imperial Highway, providing access to the Project Area.
- **I-405 (San Diego Freeway)** is a north-south freeway located east of the Project. Located about 2.5 miles from the Project Area, I-405 provides five to six lanes in each direction. Access to the Project Area is provided via on and off-ramps to El Segundo Boulevard.

East – West Streets

Roadways located within or adjacent to the Project Area:

- **El Segundo Boulevard** is designated as a Secondary Arterial (east of Main Street) and a 4-Lane Collector (west of Main Street) and defines a portion of the southern boundary of the Project Area. El Segundo Boulevard provides two travel lanes in each direction. El Segundo Boulevard provides access to and from I-405, which is approximately 2.5 miles east of the Project Area.
- **Grand Avenue** is designated as a Secondary Arterial and bisects the Project Area east-west. Grand Avenue provides access to the Vista Del Mar, west of the Project Area. Grand Avenue includes two travel lanes in each direction with parking permitted on both sides of the street and both sides of the median. Grand Avenue is also a “sharrowed” (shared vehicle-bicycle lane marking) bicycle route. Grand Avenue is a dedicated truck route, and the speed limit is 25 mph.
- **Mariposa Avenue** is designated as a 2-Lane Collector (east of Main Street) and a Local Street (west of Main Street) and forms portions of the northern boundary of the Project Area. Mariposa Avenue provides one travel lane in each direction, with parking on some segments.



Roadways that provide local and regional access to the Project Area:

- **Imperial Highway** is designated as a Secondary Arterial oriented east-west and is located approximately 0.9 miles north of the Project Area. Imperial Highway provides two travel lanes in each direction and features Class II bicycle lanes. Northeast of the Project Area, Imperial Highway provides access to and from I-105.

North – South Streets

Roadways located within or adjacent to the Project Area:

- **Main Street** is designated as a Secondary Arterial (south of Grand Avenue) and a 4-Lane Collector (north of Grand Avenue) and serves as the primary north-south thoroughfare through the Project Area. Main Street is the center of commercial activity in the Project Area. Main Street provides two travel lanes in each direction and is a “sharrowed” bicycle route. Main Street provides access to and from Imperial Highway to the north and El Segundo Boulevard to the south. The speed limit on Main Street is 25 miles per hour (mph). South of Grand Avenue, Main Street is a truck route, as defined in the General Plan Circulation Element, which is noted by signage.
 - South of Holly Avenue, Main Street can accommodate in-road bollards for temporary street closures. Bollards can be mounted in the permanent in-road receptacles to temporarily close approximately 340 feet of Main Street for special events, such as the farmer’s market.

Roadways that provide local and regional access to the Project Area:

- **CA-1 (Pacific Coast Highway, PCH, Sepulveda Boulevard)** is designated as a Major Arterial and is located approximately one mile east of the Project Area. PCH provides four travel lanes in each direction and serves as access to I-105, LAX, and neighboring cities to the south of El Segundo.
- **Vista Del Mar** is designated as a Secondary Arterial, located approximately two-thirds of a mile west of the Project Area. Vista Del Mar provides two travel lanes in each direction and serves as the major coastal thoroughfare through El Segundo. From the Project Area directly, access to Vista Del Mar is only provided via Grand Avenue.

Intersection Control

There are three signalized intersections in the Project Area: Main Street and Mariposa Avenue; Main Street and Holly Avenue; and at Main Street and Grand Avenue. All other intersections include one of the following control types:

- All-way stop control, in which vehicles on all approaches must stop.
- Side-street stop control, in which vehicles on side-street approaches must stop, while vehicles on major road approaches do not.



The Project Area includes an extensive alleyway network, which provides access to off-street parking, business access, and truck circulation. Most intersections between alleyways and roadways are side-street stop-controlled, though many lack advance stop bars on the alley approach, which can increase right-of-way confusion and cause conflicts with cross-traffic pedestrians, bicyclists, or vehicles.



Existing Public Transit

The Project Area is served by Beach Cities Transit and City of El Segundo Transportation. Below is a list of the bus routes that provide service to and within the Project Area:

Beach Cities Transit Line 109

- Line 109 connects LAX and Torrance via El Segundo, Manhattan Beach, Hermosa Beach, and Redondo Beach. In Downtown El Segundo, this line utilizes along Main Street and Grand Avenue. This line has headways of 40-50 minutes during weekdays.

Lunchtime Shuttle

- Lunchtime Shuttle services were suspended during the COVID-19 pandemic and had not resumed as of Winter 2023. Previously, the City of El Segundo Transportation Lunchtime Shuttle operated on a continuous loop between Downtown El Segundo and the Smoky Hollow area to the east from 11:45 to 2pm on weekdays.

Beach Shuttle

- Following suspended service during the COVID-19 pandemic, the City partnered with Swoop, Inc. to resume Beach Shuttle service for the 2022 summer season. The Beach Shuttle operates between El Segundo and El Porto Beach during the El Segundo Unified School District summer break. There are several stops located near the Project Area.

Dial-a-Ride

- The City currently operates Dial-a-Ride service in partnership with Lyft. This service primarily focuses on enhancing accessibility for seniors and disabled residents. The service operates on weekdays and serves the entirety of the Project Area.



Existing Bicycle and Pedestrian Facilities

Bicycle Facilities

Main Street and Grand Avenue currently provide bicycle facilities in the Project Area. These roadways are designated as Class III bicycle routes with on-pavement shared lane markings, also known as “sharrows”, for their full extents within the Project Area.

Pedestrian Facilities

Currently, pedestrian facilities are provided throughout the Project Area, including sidewalks on all streets, and marked crosswalks at both intersections and at some midblock locations. There are four midblock crosswalks, all located on Main Street, which feature pedestrian-activated in-road flashing lights, crosswalk signs, and yield paddles. These midblock crossings lack crosswalk lines, which reduces their visibility to drivers.

While some intersection pedestrian crossings in the Project Area feature ADA-compliant curb ramps with truncated domes, most lack these accessibility enhancements. Additionally, most crosswalks lack edge lines and striping. Both signalized intersections in the Project Area do not provide pedestrian countdown on the signal heads.



2.2 Cumulative with Project Conditions

To develop the Cumulative with Project Conditions, the residential and employment effects of the net-new land use quantities described in **Table 1-1** were incorporated into the Activity-Based Model (ABM.) The ABM methodology used to develop the VMT analysis is further described in **Section 3.2** of this TA. Also considered in the Cumulative with Project Condition are the effects of the preferred roadway cross sections **Table 3-5** as they relate to the number of vehicular travel lanes.

The Smoky Hollow Specific Plan³ Area is located to the east of the Project Area. As defined by the City of El Segundo, the Smoky Hollow Specific Plan provides a framework and long-term strategy to guide public and private investment in the Smoky Hollow area. As portions of the Smoky Hollow Specific Plan are in the same transportation analysis zones (TAZs) as the Project Area, the analysis in this TA includes the employment growth projections defined within the Smoky Hollow Specific Plan. The inclusion of the Smoky Hollow Specific plan as a related project allows for the evaluation of trip generation and attraction interaction between the Project itself and the related project and any associated effects on trip length.

³ *Smoky Hollow Specific Plan, City of El Segundo, 2018.*



3. CEQA Transportation Assessment

The analysis contained in this section pertains to the “operation” scenario of the Project; that being, a year 2040 condition in which the Project Area is built-out to reflect the land use quantities enabled by the Project, as described in **Table 1-1**, the preferred conceptual roadway cross sections described in **Table 3-5**, and the recommended general transportation network enhancements described in **Section 3.3**. The analysis of the construction phases of future development, roadway design, and infrastructure enhancements would be assessed during the review in the future with each individual development project enabled by this plan or roadway improvement implementation, when the actual construction methods and approaches are known. Due to the programmatic nature of the Project, a detailed construction analysis is not included in this TA.

3.1 Plans, Programs, Ordinances and Policies (PPOP) Review

1. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

The purpose of this section is to determine whether the Project conflicts with a transportation-related City plan, program, ordinance, or policy that was adopted to protect the environment. A project would not be shown to result in an impact merely based on whether a project would not implement an adopted plan, program, ordinance, or policy. Rather, it is the intention of this threshold test to ensure that proposed development does not conflict with nor preclude the City from implementing adopted plans, programs, ordinances, or policies. Furthermore, under CEQA, a project is considered consistent with an applicable plan if it is consistent with the overall intent of the plan and would not preclude the attainment of its primary goals. A project does not need to be in perfect conformity with each and every policy. Finally, any inconsistency with an applicable policy, plan, or regulation is only a significant impact under CEQA if the policy, plan, or regulation were adopted for the purpose of avoiding or mitigating an environmental effect and if the inconsistency itself would result in a direct physical impact on the environment.

This evaluation involved review of City documents including the *SCAG RTP/SCS*, *City of El Segundo General Plan Circulation Element* and the *South Bay Bicycle Master Plan*.

- The Southern California Association of Governments (SCAG) updates its long-range (i.e., minimum 20 years) **Regional Transportation Plan/ Sustainable Communities Strategy (RTP/SCS)**⁴ every four years, per federal law (23 U.S.C.A. §134 et seq) and state law (SB 375). SCAG’s 2020–2045 RTP/SCS “Connect SoCal” was adopted in May 2020 for federal transportation conformity purposes; the plan in its entirety was formally adopted in September 2020.

⁴ “Connect SoCal”, The 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy of The Southern California Association of Governments, September 2020



- The SCS is a required element of the RTP that provides a plan for meeting GHG emissions reduction targets set forth by the CARB. It provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the South Coast Air Quality Management District (SCAQMD). California ARB has determined SCAG’s reduction target for per capita vehicular emissions to be 8% by 2020 and 19% by 2035 relative to the 2005 baseline. Successfully meeting these targets will require substantial effort to reduce VMT. The 2020–45 RTP/SCS calls for investing \$638 billion over the 25-year term of the plan toward over 4,000 transportation projects, all of which collectively are expected to result in a 5% reduction in daily VMT per capita and a more than 25% decrease in traffic delay per capita. Investments will focus on maintaining and better managing the existing transportation network, expanding mobility choices, and increasing investment in transit and complete streets.
- Of the ten goals presented in the 2020–2045 RTP/SCS, the following five are applicable to transportation:
 - ◆ Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods.
 - ◆ Goal 3: Enhance the preservation, security, and resilience of the regional transportation system.
 - ◆ Goal 4: Increase person and goods movement and travel choices within the transportation system.
 - ◆ Goal 7: Adapt to a changing climate and support an integrated regional development pattern and transportation network.
 - ◆ Goal 8: Leverage new transportation technologies and data-driven solutions that result in more efficient travel.
- As a land use plan that enables infill development, densification of land uses, and multimodal mobility improvements, the Project is consistent with the RTP/SCS and would not preclude any of Goals 2, 3, 4, 7, or 8 from being realized.
- **City of El Segundo General Plan Circulation Element⁵ (Circulation Element)** is intended to guide the City’s provision of a safe, convenient, and efficient circulation system. The Circulation Element includes a Master Plan of Streets and an Alternative Modes of Travel section, and defines goals, objectives, and policies related to transportation. The Project is consistent with the reviewed policies of the Circulation Element. See **Appendix B**, for a detailed review of consistency with relevant policies in the Circulation Element.
- **South Bay Bicycle Master Plan⁶ (BMP)** is intended to guide the development and maintenance of a comprehensive bicycle network and set of programs and policies throughout the cities of El Segundo, Gardena, Hermosa Beach, Lawndale, Manhattan Beach, Redondo Beach, and Torrance through 2031. Chapter 2 of the BMP defines goals, objectives, and policy actions, and Chapter 3 of

⁵ City of El Segundo, *City of El Segundo General Plan Circulation Element*, September 2004

⁶ *South Bay Bicycle Master Plan – Draft Final Plan*, August 2011



the BMP includes proposed bicycle facilities for the City of El Segundo specifically. The Project is consistent with the reviewed policies of the Circulation Element. See **Appendix B** for a detailed review of consistency with relevant policies in the BMP.



3.2 Vehicle Miles Traveled Analysis

2. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b), (based on methodology at thresholds outlined in the City of El Segundo SB 743 Implementation Guidelines)?

The City of El Segundo SB 743 Implementation Guidelines⁷ define two metrics for determining thresholds of significance – efficiency and net change. **Table 3-1** describes the efficiency and net change metrics and allowable methods, directly according to the SB 743 Guidelines.

Table 3-1: Significance Threshold Criteria and Methodology

Threshold Basis	Efficiency	Net Change
Example Land Use	Residential, Professional Office	Retail, Hotel, Sports Venue Industrial
Example VMT Thresholds	VMT per service population ¹	Region VMT change
Customer Component	No	Yes
Allowable Methods	Non-Significant Screening Criteria, The City of El Segundo Sketch Planning Tool, Travel Demand Model	Non-Significant Screening Criteria, Travel Demand Model

Source: City of El Segundo, SB 743 Implementation Guidelines, May 2022, adopted September 2022.

¹Service population is defined as the sum of population (capita) and employees of a given geography

The SB 743 Guidelines further state that “for non-typical land use projects, the project applicant will need to work with the City to determine which metric and methodology should be used for analyzing the project’s VMT impact.” As the Project includes a considerable increase in various land use quantities, as defined in **Table 1-1**, which would represent most of the employment in the Project TAZ in 2040, utilization of a travel demand model (SCAG RTP/SCS Activity-Based Model [ABM]) was determined to be the most appropriate methodology. Preparation of the ABM for the analysis in this TA involved coordination with City staff, including the confirmation of existing land use data within the Project Area and employment growth within the Smoky Hollow Specific Plan Area, a related project.

The ABM simulates daily activities and travel patterns of all individuals in the region, as affected by transportation system conditions⁸. All vehicle-trips are traced to the zone or zones of study. This includes internal to internal, internal to external, and external to internal trips. These modeled trips are used to calculate VMT for the TAZ’s of interest within the model.

⁷ City of El Segundo, SB 743 Implementation Guidelines, May 2022, adopted September 2022.

⁸ Southern California Association of Governments, 2016 Regional Travel Demand Model and Model Validation, 2020.



Impact Criteria

The City’s VMT impact criteria are specified in the SB 743 Guidelines. The threshold of significance evaluation method is defined by land use, as noted in **Table 3-2**.

Table 3-2: VMT Thresholds of Significance Evaluation Method

Land Use	Threshold of Significance Evaluation Method
Residential	The existing daily VMT per service population for the City of El Segundo based on data from Replica ¹
Office	The existing daily VMT per service population for the City of El Segundo based on data from Replica ¹
Retail	Net increase in total daily VMT

Source: City of El Segundo, SB 743 Implementation Guidelines, May 2022, adopted September 2022.

¹The data source known as Replica, which was utilized for the SB 743 Guidelines development, is further described below in the *Vehicle Miles Traveled Baseline* section.

Utilizing the threshold of significance evaluation method described in **Table 3-2**, the SB 743 Guidelines define the following thresholds of significance:

Table 3-3: VMT Thresholds of Significance as Defined in SB 743 Guidelines

Land Use	VMT Threshold ¹	Basis and Data Source
Residential	24.5 VMT/ Service Population	The existing VMT per service population for City of El Segundo based on data from Replica
Office	24.5 VMT/ Service Population	The existing VMT per service population for the City of El Segundo based on data from Replica
Retail	Net regional change	Using the City of El Segundo as the basis and Replica as the data source
Other Employment	24.5 VMT/ Service Population	The existing VMT per service population for the City of El Segundo based on data from Replica
Other Customer	Net regional change	Using the City of El Segundo as the basis and Replica as the data source

Source: City of El Segundo, SB 743 Implementation Guidelines, May 2022, adopted September 2022.

¹As discussed in *Vehicle Miles Traveled Baseline* (below), the threshold used for this analysis was modified to maintain consistency with the 2040 with Project scenario using travel demand modeling. The values in this table are provided for informational purposes regarding the City’s Replica-based threshold.

Vehicle Miles Traveled Baseline

The VMT per service population baseline described in **Table 3-3** is based on Replica data from 2019, as described in the City’s SB 743 Implementation Guidelines⁹. As described in the SB 743 Guidelines, “Replica uses anonymized cell phone data combined with other sources of location-based data such as credit card transactions to estimate trips”. Discussed earlier in this section, the most appropriate evaluation for the Project was determined to be a travel demand model, which differs from Replica data. For consistency in

⁹ City of El Segundo, SB 743 Implementation Guidelines, May 2022, adopted September 2022.



methodology between the Project and baseline VMT per service population establishment, the ABM was utilized to produce an “existing without Project” scenario, replacing the nominal 24.5 Citywide VMT/SP defined from Replica, which would not be a “like for like” comparison to the travel demand model results.

The “existing without Project” (2023) scenario was developed using land use data obtained from the City, allowing a more precise depiction of land use within the Project Area and surrounding areas compared to that produced in SCAG regional population projections, which is typically used to inform ABM inputs if more granular data are not available. The existing land use data is included as **Appendix D** to this TA. The existing land use data were converted to population and employment by industry sector using factors defined in the City of Los Angeles VMT Calculator Documentation¹⁰. The City of LA VMT Calculator Documentation includes nationally and regionally-researched land use and transportation data sources for conversion rate development specific to southern California. The specific source of each conversion rate is cited in that document. The resulting SED that was input into the ABM for the existing without Project scenario is included in **Appendix C**.

As a regional and long-term transportation forecasting tool with millions of people and transportation network data inputs, an ABM network does not exist for each and every possible scenario year. Such is the case for the year 2023; thus, the ABM 2016 scenario was utilized to produce an initial VMT metric for baseline establishment. To produce a metric for the year 2023, linear interpolation was utilized based on the trend line between model years 2016 and 2045, using ABM outputs obtained directly from SCAG.

Based on this methodology, the VMT per service population (VMT/SP) in 2023 for the City of El Segundo was 26.2 VMT/SP. Service population is defined as the sum of population (capita) and employees of a given geography. This metric of 26.2 VMT/SP was utilized as the residential and office land use VMT impact threshold for the Project’s transportation analysis zone (TAZ). If the “2040 with Project” VMT/SP is higher than the established City baseline, then there is a significant transportation impact. If it is lower, there is not a significant impact based on this metric.

A similar interpolation methodology was utilized to determine the Citywide total daily VMT baseline, which defines the threshold metric for retail projects. If the Project results in a net increase in total daily Citywide VMT, then there is a significant impact based on the retail VMT metric. If the Project does not result in a net increase in total daily Citywide VMT, there is not a significant impact based on that metric. Consistent with the SB 743 Guidelines, neither baseline nor “2040 with Project” VMT metrics include truck trips. Given that the Project enables buildout of multiple land uses within a defined geography, including residential, office, and retail, the Project was evaluated for transportation impact based on both VMT per service population of the TAZ and based on a net increase in total daily Citywide VMT.

Impact Analysis

Per the City’s SB 743 Guidelines, VMT per service population and total daily Citywide VMT metrics were developed as initially described in **Table 3-3** and further explained in the *Vehicle Miles Traveled Baseline*

¹⁰ City of Los Angeles VMT Calculator Documentation, Version 1.3, May 2020.



section earlier in this chapter. The analysis in this TA utilized the SCAG RTP/SCS ABM for scenario years 2016 without Project, with outputs interpolated to 2023 to produce the Baseline, and 2045 with Project, interpolated to 2040 to produce “2040 with Project” using a similar interpolation methodology to that described in *Vehicle Miles Traveled Baseline*.

Socioeconomic data (SED) for the ABM was obtained from SCAG and updated for the Project Area TAZ based on existing parcel data provided by the City and Project buildout through 2040. The adjacent TAZs in which the Smoky Hollow Specific Plan (related project) is located were modified based on the employment projections described in that plan¹¹.

The VMT/SP for the Project TAZ was calculated to be 24.6, which is lower than the 2023 baseline of 26.2, evidence of a less than significant impact to VMT for residential or office projects. The total daily Citywide VMT in 2040 is estimated to be 1,716,136, which is lower than the 2023 Baseline of 1,739,658, evidence of a less than significant impact for retail projects. These determinations are summarized in **Table 3-4**.

Table 3-4: Project VMT Metrics

Geography	2023 VMT/SP (City Baseline)	2040 VMT/SP (Project TAZ with Project)	Impact Determination	Significant Impact?
Project TAZ 21115000	26.2	24.6	Higher VMT/SP than baseline?	No
Geography	2023 Total Daily VMT (Baseline)	2040 Total Daily VMT (with Project)	Impact Determination	Significant Impact?
Citywide	1,739,658	1,716,136	Net increase in Citywide Total Daily VMT?	No

Source: Fehr & Peers, 2023

Summary

The analysis conducted demonstrates that under the current City VMT methodology, the Project would result in less than significant impacts on VMT. See **Appendix C** for additional information about the inputs and supporting documentation for the VMT analysis.

¹¹ *Smoky Hollow Specific Plan, City of El Segundo, 2018.*



3.3 Geometric Hazards Review

3. Would the project substantially increase hazards due to a geometric design feature or incompatible use?

This section includes a discussion of impacts regarding the potential for an increase of hazards due to a geometric design feature that generally relates to the design of access points to, from, and within the Project Area and may include safety or operational impacts.

3.3.1 Proposed Pedestrian Network

Less than significant impact.

The Project proposes the following enhancements to the pedestrian network in the Project Area:

General Pedestrian Enhancements

- Add mirrors to parking structure, driveway, and alleyway exits to increase the visibility of approaching pedestrians.
- Remove sidewalk obstructions or re-route around obstructions, such as trees, to increase accessibility, especially for those using wheeled devices.
- Upgrade curb cuts at driveways and alleyways to ADA-compliant curb ramps to improve accessibility for those using mobility devices.
- Widen sidewalks on Main Street, Grand Avenue, and Richmond Street segments, according to preferred road sections discussed in **Section 3.3.3** of this TA.

Midblock Crosswalks

- Install pedestrian signals to better alert drivers to crossing pedestrians and encourage signal compliance.
- Install raised crosswalks for better visibility and awareness of crossing pedestrians.
- Stripe crosswalks with high-visibility continental-style striping to increase their visibility or, at minimum, stripe crosswalk edge-lines to meet California Manual on Uniform Traffic Control Device (MUTCD) standards.
- To better serve users with mobility challenges, upgrade ramps to meet ADA compliance by adding truncated domes, modifying pedestrian push button locations relative to the ramp, and providing audible push buttons.

Controlled Intersection Crosswalks

- Upgrade curb ramps to meet ADA compliance by adding truncated domes and modifying pedestrian push buttons.



- Crosswalks shall provide decorative paving or continental style striping to increase their visibility. At a minimum, the crosswalk edge-lines shall be striped to meet California Manual on Uniform Traffic Control Device (MUTCD) standards.
- At signalized intersections, install pedestrian countdown heads to meet current standards and inform pedestrians of the remaining walk time available.
- Ensure that pedestrian signals comply with current MUTCD pedestrian clearance time standards, with a standard walking speed of 3.5 feet per second.

The above listed pedestrian network enhancements should be designed and constructed to conform to the latest MUTCD design standards at the individual element implementation level. These enhancements would generally improve pedestrian access and comfortability and should be designed as to not introduce geometric design hazards; thus, the pedestrian network enhancements would have no significant impact under this impact criterion

3.3.2 Proposed Bicycle Network

Less than significant impact.

The Project proposes the roadway cross sections for Main Street and Grand Avenue as described in **Table 3-5**. The preferred roadway cross sections include a Class III shared bicycle route with “sharrows” on Grand Avenue, which currently exists on the corridor, and a Class II bicycle lane on Main Street. The proposed bicycle lane on Main Street would provide greater horizontal separation and additional striping between vehicles and cyclists than the Class III bicycle route which currently exists on the corridor. Upon final engineering design of the proposed roadway sections, the bicycle facilities should be signed and striped according to MUTCD standards, as to not introduce geometric design hazards; thus, the preferred bicycle network would have a less than significant impact under this impact criterion.

3.3.3 Proposed Roadway Sections

Less than significant impact.

The Project proposes modified roadway cross sections for Main Street, Grand Avenue, and Richmond Street. The preferred cross sections are illustrated in **Appendix A** and are summarized qualitatively in **Table 3-5**.



Table 3-5: Project Preferred Road Section

Road	Approximate Extents	Existing Typical Section ¹	Preferred Typical Section ¹	Geometric Hazard Impact
Main Street	El Segundo Blvd to Mariposa Ave	12' sidewalks (both sides) 8' parallel parking (both sides) Four 10' travel lanes (two each direction) with "sharrows"	15' outdoor dining/sidewalks (both sides) 8' parallel parking (both sides) 6' bicycle lane (one each direction) Two 11' travel lanes (one each direction)	Generally, improves pedestrian and cyclist comfort All sidewalks, parking lanes, travel lanes, bicycle facilities to be designed to MUTCD standards Less than significant impact
Grand Avenue	Standard St to Concord St	10' sidewalks (both sides) 8' parallel parking (both sides of street and median) Four 11' travel lanes (two each direction) with "sharrows" 4' median	18' outdoor dining/sidewalks (both sides) 16' angled parking (back-in, both sides) Two 12' travel lanes (one each direction) with "sharrows" 8' median	Generally, improves pedestrian comfort Back-in angled parking to reduce modal conflicts All sidewalks, parking lanes, travel lanes, bicycle facilities to be designed to MUTCD standards Less than significant impact
Richmond Street	Grand Ave to north of Franklin Ave	8-10' sidewalks (both sides) 13' angled parking (one side, front-in) 7' parallel parking (one side) Two 11' travel lanes (one each direction)	19' outdoor dining/sidewalks (both sides) Two 11' travel lanes (one each direction)	Generally, improves pedestrian comfort All sidewalks and travel lanes to be designed to MUTCD standards Less than significant impact

Source: Fehr & Peers and RRM Design Group, 2023

¹Dimensions are approximate. Exact dimensions to be determined during engineering design

3.3.4 Proposed Vehicular Circulation Enhancements

Less than significant impact.

The Project proposes the following enhancements to the vehicular network in the Project Area:

- Protected left turn phases could be added in all directions at the intersection of Main Street and Grand Avenue to reduce left turn conflicts with oncoming vehicles and pedestrians in the adjacent crosswalk.



- All side-street stop-controlled intersections should include stop signs and stop bars on the controlled approaches to reduce right-of-way confusion.

These enhancements would generally reduce the potential for vehicle conflicts and should be designed according to MUTCD standards as to not introduce geometric design hazards; thus, the vehicular network enhancements would have a less than significant impact.

3.3.5 Proposed Public Transit Amenities

Less than significant impact.

The Project proposes the following enhancements to the bus stops in the Project Area:

- Provide transit shelters at Project Area bus stops, where space allows. Transit shelters could be designed to reflect City or Downtown community aesthetic desires.
- At a minimum, include a bench and waste bin at each bus stop.
- Increase bus zone length by extending red curb at stops, to at least 35 feet where feasible.

These enhancements would provide greater rider comfort and reduce the potential for bus-vehicle conflicts. Transit stop enhancements should be designed according to MUTCD standards as to not introduce geometric design hazards; thus, the transit amenity enhancements would have a less than significant impact.

3.3.6 Proposed Parking Enhancements

Less than significant impact.

The Project proposes the following physical parking enhancements in the Project Area:

On-Street Parking

- Stripe all available parallel parking spaces with delineation lines to minimize inefficient parking behavior and draw attention to available spaces.
- Re-stripe parking spaces to be “back-in” to increase driver visibility of cyclists and other vehicles while exiting parking spaces

Off-Street Parking

- Install increased parking wayfinding signage on streets adjacent to public parking structures or online parking maps.
- Install signage on the Richmond Street and Marketplace Alley entrances to the parking structure that directs drivers searching for public parking to the Grand Avenue entrance.
- Install a dynamic “spaces available” sign system in the parking structure to optimize utilization of existing supply.



- Encourage or require subterranean garages for larger new development that are for office or residential use only.
- Further analyze the feasibility of new parking structures at the northeast corner of Richmond Street and Franklin Avenue and at the northwest corner of Grand Avenue and Standard Street to increase off-street parking supply buffer to support future development and growth in activity levels within the Project Area.

These enhancements should be designed according to MUTCD standards as to not introduce geometric design hazards; thus, the parking enhancements are concluded to have a less than significant impact.

3.3.7 Proposed Placemaking Enhancements

Less than significant impact.

The Project proposes the following placemaking enhancements on Richmond Street (between Grand Avenue and north of Franklin Street) in the Project Area:

- Install in-road bollard receptacles at both ends of the segment, similar to those on Main Street, to allow ongoing temporary closures, while maintaining vehicle access during non-event periods.

This enhancement would provide greater pedestrian comfort than existing conditions. Final engineering design of this placemaking enhancement should be according to MUTCD standards as to not introduce geometric design hazards; thus, the placemaking enhancements are concluded to have a less than significant impact.

3.4 Inadequate Emergency Access Review

4. Would the project result in inadequate emergency access? (Inadequate Emergency Access)

This section includes a discussion of the impacts regarding the potential for inadequate emergency access resulting from the Project, with individual analyses of Medical, Fire, and Police access. As described in **Table 3-5**, the Project includes roadway section modifications on Main Street, Grand Avenue, and Richmond Street. The preferred sections for Main Street and Grand Avenue would both result in a reduction in the number of travel lanes from two lanes in each direction to one lane in each direction. As most streets within and surrounding the Project Area consist of one travel lane in each direction, including Mariposa Avenue, Franklin Avenue, and Maple Avenue, this preferred roadway section would not present unusual driving conditions for the area. Furthermore, relatively frequent side-streets, driveways, and alleyways (approximately every 150-460 feet) would continue to provide opportunities for vehicles to pull over and allow the passage of emergency vehicles, despite the reduction in number of travel lanes.

If the signals at the intersections of Main Street and Grand Avenue and Main Street and Mariposa Avenue are upgraded as described in **Section 3.3.4**, emergency vehicle preemption should be included as a project design feature during the planning and implementation of that specific improvement.



3.4.1 Emergency Medical Access

Less than Significant Impact

The most proximate hospital with an emergency room to the Project Area is Centinela Hospital Medical Center in Inglewood, 6.5 miles to the northeast. **Table 3-6** summarizes two typical routes between the Project Area (defined as the intersection of Concord Street and Grand Avenue, the westernmost intersection in the Project Area), the distance and approximate peak hour travel time between the Project Area and Centinela Hospital Medical Center, and the portion of that distance and travel time that would occur on a street segment with a lane reduction with the preferred roadway sections (either Main Street or Grand Avenue).

Table 3-6: Medical Access to Centinela Hospital Medical Center

Major Route	Total Distance	Distance on Reduced-Lane Segment	Typical Peak Hour Travel Time ¹	Existing Typical Travel Time on Segment Proposed to Have Reduced Number of Travel Lanes ¹	Existing Typical Travel Time on Route with Similar Existing Geometry to Preferred Road Sections ^{1,3}
<i>(North) Grand Ave, Main St, Imperial Hwy, I-105</i>	6.5 miles	0.3 miles	16-35 min	3 min	3 min ²
<i>(South) Grand Ave, Main St, El Segundo Blvd, I-405</i>	6.5 miles	0.2 miles	14-35 min	3 min	2 min ³

Source: Fehr & Peers, 2023

¹Typical Peak Hour Travel time is based on Google Maps “depart at” estimations for Wednesday, March 1st at 5:00 pm. This time estimate is for private vehicles that would be subject to queuing and red-lights, which emergency vehicles can typically bypass or proceed through.

²Similar geometry route consists of Concord Street to Mariposa Avenue, both streets have one lane in each direction

³Similar geometry routes consists of Concord Street and El Segundo Boulevard, both of which have one lane in each direction³ Routes with similar existing geometry are those which have the same number of travel lanes as Grand Avenue and Main Street would have following implementation of the improvements described above in section 3.3.3, Proposed Roadway Sections. These routes are assumed to have a similar travel time per distance as Grand Avenue and Main Street would have following implementation.

For the north route to Centinela Hospital Medical Center (via I-105), typically about three minutes of the travel time on this route would occur on a street with a lane reduction under the Project’s preferred roadway sections. Utilizing a similar route, of only two-lane (one each direction) roadways, via Concord Street and Mariposa Avenue instead of Grand Avenue and Main Street, the travel time is also three minutes.

For the south route to Centinela Hospital Medical Center (via I-405) typically, about three minutes of the usual 14–35-minute travel time on this route would occur on a street with a lane reduction under the Project’s preferred roadway sections, depending on traffic conditions. Utilizing a similar route, of only



two-lane (one each direction) roadways, via Concord Street and El Segundo Boulevard instead of Grand Avenue and Main Street, the travel time is also three minutes. Additionally, should the modified roadway cross sections on Grand Avenue and Main Street be considered undesirable for emergency medical vehicle travel, the similar routes discussed above could serve as alternate routes to the nearest emergency room.

This comparison, for both the north and south routes to Centinela Hospital Medical Center indicates that the emergency vehicle access would remain similar to the existing condition. Thus, a less than significant impact of the lane reduction on emergency medical vehicle access in the Project Area is expected.

3.4.2 Emergency Fire Access

Less than Significant Impact

The preferred roadway sections for Main Street and Grand Avenue should be designed to allow fire vehicle access to hydrants, with accompanying striping and signage where necessary.

There is currently an El Segundo Fire Department (ESFD) Station (Station #1) located within the Project Area, with a driveway located approximately 200 feet north of the intersection of Main Street and Grand Avenue. Following the evaluation from the Emergency Medical Access determination discussed above, emergency vehicle travel time from Station #1 to any point within the Project Area is expected to be similar with the preferred roadway sections on Main Street and Grand Avenue as it is currently. Thus, a less than significant impact is expected for Emergency Fire Access.

3.4.3 Police Access

Less than Significant Impact

The El Segundo Police Department (ESPD) Headquarters is currently located within the Project Area. Following reasoning from the Emergency Medical Access and Emergency Fire Access determinations discussed above, emergency vehicle travel time from the ESPD Headquarters to any point within the Project Area is expected to be similar with the preferred roadway sections on Main Street and Grand Avenue as it is currently. Thus, a less than significant impact is expected for Police Access.



4. Summary and Conclusions

The proposed Project is estimated to result in a less than significant transportation impact based on methodology and thresholds established in the El Segundo SB 743 Implementation Guidelines. This determination is summarized by CEQA Appendix G checklist item below:

4.1.1 Plans, Programs, Ordinances and Policies (PPOP) – Summary

1. Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Evaluation

Includes review of following City-adopted documents:

- SCAG Regional Transportation Plan/ Sustainable Communities Strategy
- City of El Segundo General Plan Circulation Element
- South Bay Bicycle Master Plan

Determination

Less than significant impact. This determination is further discussed in **Section 3.1** of this TA and the full PPOP analysis is documented in **Appendix B**.

4.1.2 VMT – Summary

2. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3 subdivision (b), (based on methodology at thresholds outlines in the City of El Segundo SB 743 Implementation Guidelines)?

Evaluation

Includes estimation of the following metrics:

- VMT per service population compared to City threshold
- Net change in regional daily VMT

Determination

Less than significant impact. The VMT analysis methodology and findings are further discussed in **Section 3.2** of this TA, with ABM input data documentation included in **Appendix C**.

4.1.3 Geometric Hazards Review – Summary

3. Would the project substantially increase hazards due to a geometric design feature or incompatible use?



Evaluation

Includes review of the of the following transportation network enhancements:

- Proposed Pedestrian Network
- Proposed Bicycle Network
- Proposed Roadway Sections
- Proposed Vehicular Circulation Enhancements
- Proposed Public Transit Amenities
- Proposed Parking Enhancements
- Proposed Placemaking Enhancements

Determination

Less than significant impact. The Geometric Hazards analysis is further discussed in **Section 3.3** of this TA.

4.1.4 Inadequate Emergency Access Review – Summary

4. Would the project result in inadequate emergency access? (*Emergency Access*)

Evaluation

Includes evaluation of the following emergency services:

- Emergency Medical Access
- Emergency Fire Access
- Police Access

Determination

Less than significant impact. The inadequate emergency access analysis is further discussed in **Section 3.4** of this TA.



Appendix A - Preferred Roadway Sections



Preferred Concept

The proposed Pedestrian Mobility Emphasis concept for Main Street envisions enhanced pedestrian comfort and outdoor gathering opportunities, with wider sidewalks and outdoor dining, and new Class II bike lanes (see Figure 3.7, Main Street Preferred Road Section). The designated bike lanes provide greater horizontal separation between cyclists and vehicular traffic than the existing Class III "sharrow" bike routes and the reduced and narrowed travel lanes allow for widened sidewalks with expanded pedestrian uses and outdoor dining opportunities. The Pedestrian Mobility Emphasis concept maintains the existing parallel parking spaces on both sides of the street and is expected to maintain a similar parking supply along Main Street as exists today.

Main Street is anticipated to host occasional or periodic street closures for community events including the weekly Farmers Market which may be partial closures of any street blocks between El Segundo Boulevard and Mariposa Avenue. Additionally, a future traffic study is recommended to analyze the potential long-term closure of Main Street to vehicles. Refer to Chapter 6 for additional information.

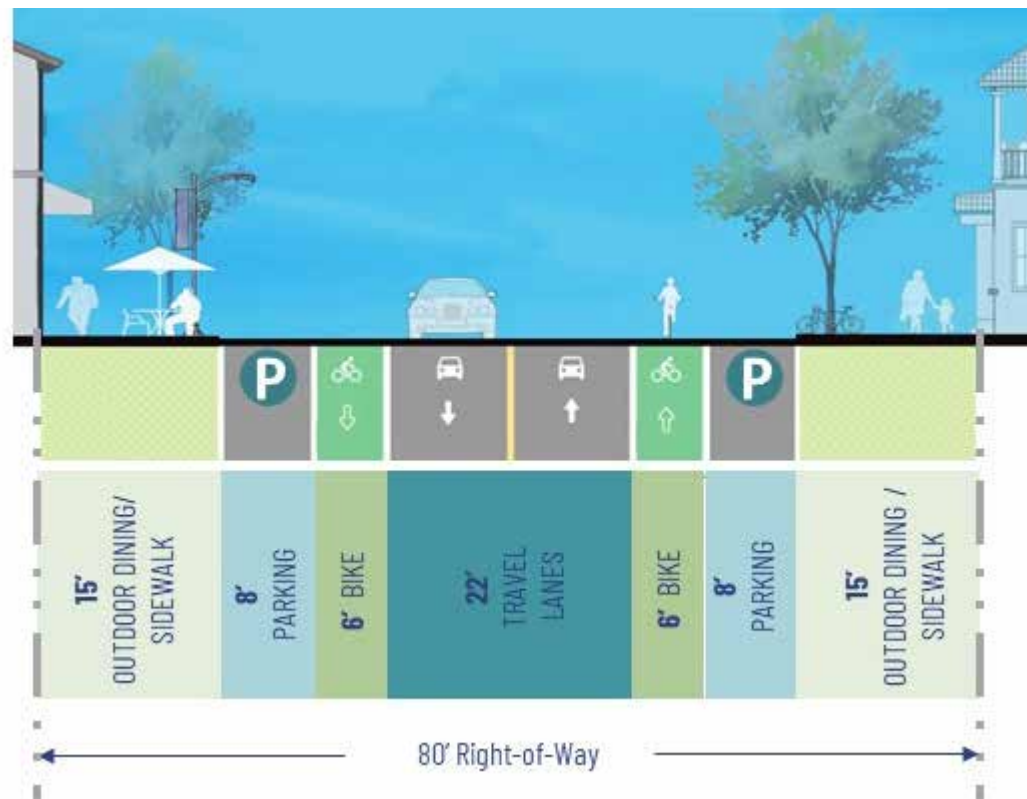


Figure 3.7 **Main Street Preferred Road Section**

Preferred Concept

The preferred Grand Avenue Pedestrian Mobility Emphasis concept envisions enhanced pedestrian comfort and outdoor gathering opportunities, with wider sidewalks and outdoor dining, while maintaining the existing Class III bike route “sharrows” (see Figure 3.10, Grand Avenue Preferred Road Section). This concept involves the conversion of parallel parking spaces on both sides of the street and along both sides of the median to angled parking to allow for wider sidewalks and outdoor dining and includes a widened central median. Though angled parking allows a higher parking space capacity over the same distance as compared to parallel parking, the removal of the median parking spaces would result in a net loss in current parking spaces along the corridor. Depending on final design, the net loss of parking on Grand Avenue under this concept could range from about ten percent to about twenty percent.

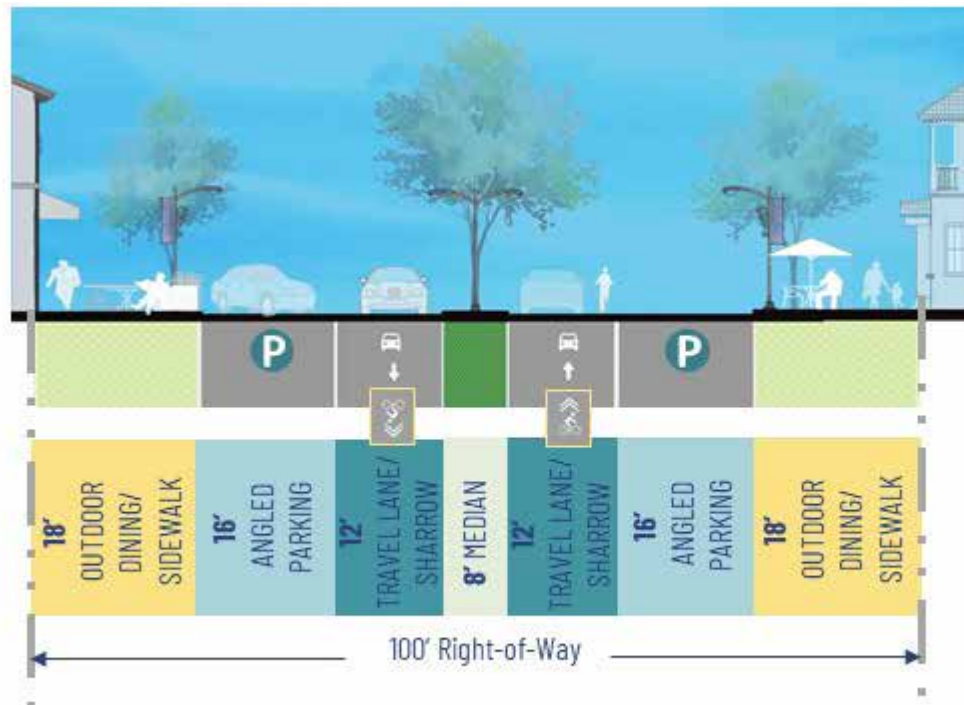


Figure 3.10 **Grand Avenue Preferred Road Section**

Preferred Concept

The preferred Richmond Street Sidewalk Dining concept for the area between Franklin Avenue and Grand Avenue envisions enhanced pedestrian comfort and expanded outdoor gathering opportunities with wider sidewalks and outdoor dining and the continuation of two travel lanes (see Figure 3.14, Richmond Street Preferred Road Section). This concept would result in the removal of all parking spaces on this portion of the street and assumes a future parking structure would be developed adjacent to Richmond Street. The Sidewalk Dining concept for Richmond Street would provide similar vehicular capacity to the existing road section.

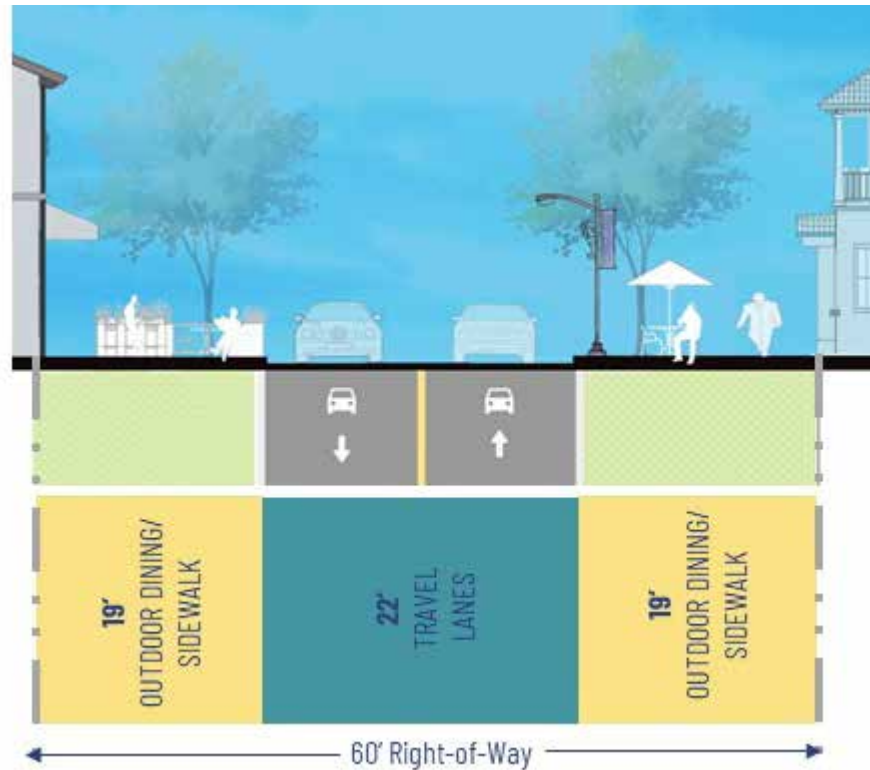


Figure 3.14 **Richmond Street Preferred Road Section**

Appendix B - PPOP Review



Appendix B

Plans, Programs, Ordinances and Policies (PPOP) Review

Would the project conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

Document	Relevant Goals, Policies, or Objectives	Description of Project's Consistency	Conflict Identified?		
City of El Segundo General Plan Circulation Element¹	Goal C1 Provision for a Safe, Convenient, and Cost Effective Circulation System Provide a safe, convenient, and cost-effective circulation system to serve the present and future circulation needs of the El Segundo community.	Objective C1-1 Provide a roadway system that accommodates the City's existing and projected land use and circulation needs.	Policy C1-1.1 Maintain and update the citywide traffic model as needed for purposes of evaluating project-related and external traffic impacts on the City circulation system.	The proposed Project would not preclude the City's ability to maintain and update the citywide traffic model as the proposed Project does not propose changes to the City's traffic modeling practices.	No
			Policy C1-1.2 Pursue implementation of all Circulation Element policies such that all Master Plan roadways are upgraded and maintained at acceptable levels of service.	As a result of SB 743, intersection delay (LOS) is no longer a criterion used to assess transportation impacts under CEQA.	No
			Policy C1-1.3 Provide adequate roadway capacity on all Master Plan roadways.	The proposed Project would provide alternatives to vehicle travel on Main Street that would limit the growth in traffic on Main Street and would not alter roadway capacity on other Master Plan Roadways. As a result, the proposed Project would not preclude the City's ability to provide adequate roadway capacity on all Master Plan roadways.	No
			Policy C1-1.4 Construct missing roadway links to complete the roadway system designated in the Circulation Element when needed to improve traffic operating conditions and to serve development.	The proposed Project would not preclude the City's ability to construct missing roadway links to complete the roadway system designated in the Circulation Element.	No
			Policy C1-1.5 Implement roadway and intersection upgrades to full Circulation Element standards when needed to improve traffic operating conditions and to serve development.	The proposed Project would not preclude the City's ability to implement roadway and intersection upgrades to full Circulation Element standards.	No
			Policy C1-1.6 Ensure that planned intersection improvements are constructed as designated in Exhibit C-9 to achieve efficient operation of the circulation system at a Level of Service "D" or better where feasible.	As a result of SB 743, intersection delay (LOS) is no longer a criterion used to assess transportation impacts under CEQA.	No
			Policy C1-1.7 Provide adequate intersection capacity to the extent feasible on Major, Secondary, and Collector Arterials to maintain LOS D and to prevent diversion of through traffic into local residential streets.	As a result of SB 743, intersection delay (LOS) is no longer a criterion used to assess transportation impacts under CEQA.	No
			Policy C1-1.8 Provide all residential, commercial, and industrial areas with efficient and safe access to the major regional transportation facilities.	The proposed Project would not preclude the City's ability to provide all residential, commercial, and industrial areas with efficient and safe access to major transportation facilities.	No
			Policy C1-1.9 Provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.	The proposed Project would not preclude the City's ability to provide all residential, commercial, and industrial areas with efficient and safe access for emergency vehicles.	No
			Policy C1-1.10 Ensure that new roadway links are constructed as designated in the Master Plan and link with existing roadways within the City such that efficient operation of the circulation system is maintained at an operating Level of Service of "D" or better.	As a result of SB 743, intersection delay (LOS) is no longer a criterion used to assess transportation impacts under CEQA. Additionally, proposed Project would not preclude the City's ability to maintain efficient operation of the circulation system on new road links.	No

¹ City of El Segundo, *City of El Segundo General Plan Circulation Element*, September 2004

Document	Relevant Goals, Policies, or Objectives	Description of Project's Consistency	Conflict Identified?	
		<p>Policy C1-1.11 Ensure that the transition from any Master Plan roadway to another Master Plan roadway at a higher classification operates safely and efficiently, incorporating the appropriate intersection configuration and any turn lanes that are necessary.</p>	Preferred roadway modifications would be designed according to CAMUTD standards related to safely and the proposed Project would not preclude the City's ability to ensure that transitions from any Master Plan roadway to another Master Plan roadway at a higher classification operates safely and efficiently, incorporating the appropriate intersection configuration and any turn lanes that are necessary.	No
		<p>Policy C1-1.12 Convert Nash Street and Douglas Street from a one-way couplet to a two-way roadway operation between El Segundo Boulevard and Imperial Highway, incorporating appropriate signage, traffic controls, and other modifications to ensure motorist and pedestrian safety and efficient traffic operations.</p>	The proposed Project does not propose changes to Nash Street and Douglas Street and would not preclude the City's from converting Nash Street and Douglas Street from a one-way couplet to a two-way roadway between El Segundo Boulevard and Imperial Highway.	No
		<p>Policy C1-1.13 Establish and maintain a citywide traffic count program, to ensure the availability of data needed to identify circulation problems and to evaluate potential improvements.</p>	The proposed Project would not preclude the City's ability to maintain a citywide traffic count program as count collection would not be prohibited by the land use buildout or preferred roadway enhancements.	No
		<p>Policy C1-1.14 Require a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval. Further, require the implementation of appropriate mitigation measures prior to, or in conjunction with, project development. Mitigation measures may include new roadway links on segments that would connect the new development to the existing roadway system, intersection improvements, and other measures. Mitigation measures shall be provided by or paid for by the project developer.</p>	The proposed Project would not preclude the City's ability to conduct a full evaluation of potential traffic impacts associated with proposed new developments prior to project approval nor would it conflict with the City's requirement for developer to implement appropriate mitigation measures.	No
		<p>Policy C1-1.15 Pursue and protect adequate right-of-way to accommodate future circulation system improvements.</p>	The proposed Project would not preclude the City's ability to pursue and protect adequate right-of-way to accommodate future circulation system improvements as the project does not propose changes to the City's right of way acquisition policy.	No
		<p>Policy C1-1.16 Encourage the widening of substandard streets and alleys to meet City standards wherever feasible.</p>	The proposed Project is not located on a substandard street or alley and would not preclude the City's ability to encourage the widening of substandard streets and alleys to meet City standards.	No
		<p>Policy C1-1.17 Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization.</p>	The proposed Project would not preclude the City's ability to coordinate with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization as the proposed Project does not propose changes to inter-agency practices.	No
		<p>Policy C1-1.18 Review future developments to ensure uniformity of street naming and avoidance of name duplication or name inconsistencies on a continuous link.</p>	The proposed Project would not preclude the City's ability to review future developments to ensure uniformity of street naming and avoidance of name duplication or name inconsistencies on a continuous link as the proposed Project does not propose changes to street naming conventions.	No
		<p>Policy C1-1.19 Continue to monitor the impacts of the I-105 Freeway on local El Segundo streets. If it is determined that freeway traffic is using local streets like California Street as a short cut through the City, evaluate potential mitigations.</p>	The proposed Project would not preclude the City's ability to monitor the impact of the I-105 Freeway on local El Segundo Streets as monitoring freeway traffic patterns would not be prohibited by the land use or preferred roadway enhancements.	No
	<p>Objective C1-2 Provide a circulation system consistent with current and future engineering standards to ensure the safety of the residents, workers, and visitors of El Segundo.</p>	<p>Policy C1-2.1 Develop and maintain a circulation system which shall include a functional hierarchy and classification system of arterial highways that will correlate capacity and service function to specific road design and land use requirements.</p>	The proposed Project would not change the existing hierarchy and classification system of arterial highways and would not preclude the City's ability to maintain a circulation system that includes a functional hierarchy and classification system of arterial highways that correlates capacity and service function to specific road design and land use requirements.	No
	<p>Objective C1-3 Ensure that the City's Master Plan Truck Route System efficiently serves the shipping needs of the commercial and industrial land uses in El Segundo while balancing</p>	<p>Policy C1-3.1 Ensure that the City's designated truck routes provide efficient access to and from the I-105 Freeway.</p>	The proposed Project would not alter the roadway configuration of existing truck routes or the existing truck route network and would not preclude the City's ability to ensure that the City's designated truck routes provide efficient access to and from the I-105 Freeway.	No
		<p>Policy C1-3.2 Ensure that the development review process incorporates consideration of off-street commercial loading requirements for all new projects.</p>	The proposed Project would not preclude the City's ability to ensure the development review process incorporates consideration of off-street commercial loading requirements for all new projects as proposed Project does not propose changes to the development review process.	No

Document	Relevant Goals, Policies, or Objectives		Description of Project's Consistency	Conflict Identified?	
		potential conflicts with residential and recreational land uses throughout the City.	<p>Policy C1-3.3 Require that all new construction on streets or corridors that are designated truck routes have a Traffic Index calculation as stated by the State Department of Transportation in order to provide a roadway structural section that will accommodate the projected truck volumes and weights.</p>	The proposed Project would not preclude the City's ability to require that all new construction on streets or corridors that are designated truck routes have a Traffic Index calculation as stated by the State Department of Transportation as the Project does not propose changes to the freight planning process.	No
			<p>Policy C1-3.4 Prohibit parking within the public right-of-way on either side two-way alleys. Parking on one side of a one-way alley could be allowed if the alley width is a minimum of 19 feet.</p>	The proposed Project would not alter any one-way or two-way alleys and would not preclude the City's ability to prohibit truck parking within the public right-of-way on either side of two-way alleys.	No
			<p>Policy C1-3.5 Ensure that the trucks from the cargo facility north of Imperial Highway at Main Street stay on the City truck route system and do not travel along Main Street.</p>	The proposed Project would not preclude the City's ability to prohibit trucks from the cargo facility north of Imperial Highway at Main Street from traveling along Main Street as the proposed Project does not propose changes to the enforcement of existing truck routes.	No
<p>Goal C2: Provisions for Alternative Modes of Transportation Provide a circulation system that incorporates alternatives to the single-occupant vehicle, to create a balance among travel modes based on travel needs, costs, social values, user acceptance, and air quality considerations.</p>	<p>Objective C2-1 Provide a pedestrian circulation system to support and encourage walking as a safe and convenient travel mode within the City's circulation system.</p>		<p>Policy C2-1.1 Encourage the development of pedestrian linkages to and from the Metro Green Line stations to encourage and attract internodal transit/ walking trips.</p>	The proposed Project would improve pedestrian facilities on Main Street and Grand Avenue and would not preclude the City's ability to develop pedestrian linkages to and from the Metro Green Line stations as the proposed Project is not adjacent to a Green Line Station and does not propose changes to Green Line station access planning.	No
			<p>Policy C2-1.2 Develop a citywide system of pedestrian walkways, alleviating the conflict between pedestrians, autos, and bicyclists throughout the City.</p>	The proposed Project would improve existing pedestrian facilities on Main Street and Grand Avenue to provide more space for pedestrian travel and potentially reduce conflicts between pedestrians, autos, and bicyclists. The proposed Project would not preclude the City's ability to further develop the citywide pedestrian network.	No
			<p>Policy C2-1.3 Encourage new developments in the City to participate in the development of the citywide system of pedestrian walkways and require participation funded by the project developer where appropriate.</p>	The proposed Project would not preclude the City's ability to encourage new developments to participate in the development of the citywide system of pedestrian walkways nor would the proposed Project preclude the City's ability to require developer to participate and fund the development of the citywide system of pedestrian walkways as the proposed Project does not suggest changes to the development process.	No
			<p>Policy C2-1.4 Ensure the installation of sidewalks on all future arterial widening or new construction projects, to establish a continuous and convenient link for pedestrians.</p>	The proposed Project would install new sidewalks along Main Street and Grand Avenue and would not preclude the City's ability to install sidewalks on all future arterial widening or new construction projects.	No
			<p>Policy C2-1.5 Encourage the continued use of the 1911 Act to provide missing sidewalk sections where applicable in residential and commercial areas.</p>	The proposed Project would not preclude the City's ability to use the 1911 Act to provide missing sidewalk sections as it does not alter State regulations.	No
			<p>Policy C2-1.6 Encourage shopping areas to design their facilities for ease of pedestrian access.</p>	The proposed Project would improve pedestrian facilities in shopping areas in Downtown El Segundo and would not preclude the City's ability to encourage shopping areas to design their facilities for ease of pedestrian access.	No
			<p>Policy C2-1.7 Closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.</p>	The proposed Project would not preclude the City's ability to closely monitor design practices to ensure a clear pedestrian walking area by minimizing obstructions, especially in the vicinity of intersections.	No
		<p>Objective C2-2 Provide a bikeway system throughout the City to support and encourage the use of the bicycle as a safe and convenient travel mode within the City's circulation system.</p>	<p>Policy C2-2.1 Implement the recommendations on the Bicycle Master Plan contained in the Circulation Element, as the availability arises, i.e., through development, private grants, signing of shared routes.</p>	The Bicycle Master Plan contained within the Circulation Element includes recommended Class III bicycle routes on Mariposa Avenue and Grand Avenue and Class II or III bicycle facilities on El Segundo Boulevard within the Project Area. The Class III facility on Grand Avenue has already been implemented under existing conditions, and the Project proposes maintaining this facility. The Project would not preclude the implementation of the Mariposa Avenue or El Segundo Boulevard facilities.	No
		<p>Policy C2-2.2 Encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.</p>	The proposed Project would not preclude the City's ability to encourage new development to provide facilities for bicyclists to park and store their bicycles and provide shower and clothes changing facilities at or close to the bicyclist's work destination.	No	
		<p>Policy C2-2.3 Develop off-street bicycle paths in corridors where appropriate throughout the City.</p>	The proposed Project would not preclude the City's ability to develop off-street bicycle paths.	No	

Document	Relevant Goals, Policies, or Objectives		Description of Project's Consistency	Conflict Identified?
		<p>Policy C2-2.4 Encourage the use of bicycles for trips to and from elementary, middle, and high schools in the area as well as parks, libraries, and other public facilities.</p>	<p>The proposed Project would encourage bicycle use with additional bicycle improvements and amenities. Specifically, the Project envisions the enhancement of east-west Class III bicycle route along Grand Avenue through Downtown to connect existing Class II bike lanes west of Downtown, and envisions improved bicycle comfort along the existing Class III bicycle route, or its upgrade to a Class II bicycle lane, along Main Street. A bicycle hub, consisting of a gated area with controlled access and potentially a repair station, as well as enhanced bicycle wayfinding signage at gateway points and the intersections of the two existing bike routes at Main Street and Grand Avenue, are also recommended. The proposed Project would not preclude the City's ability to encourage the use of bicycle trips to and from schools, parks, libraries, and other public facilities.</p>	No
		<p>Policy C2-2.5 Continue coordination of bicycle route planning and implementation with adjacent jurisdictions and regional agencies.</p>	<p>The proposed Project would not preclude the City's ability to coordinate bicycle route planning and implementation with adjacent jurisdictions and regional agencies as the proposed Project does not propose changes to regional coordination for transportation improvements.</p>	No
		<p>Policy C2-2.6 Encourage design of new streets with the potential for Class I or Class II bicycle routes that separate the automobile, bicycle, and pedestrian to the maximum extent feasible.</p>	<p>The proposed Project would not preclude the City's ability to encourage the design of new streets with the potential for Class I or Class II bicycle routes as the proposed Project is not located on a new street and does not propose changes to design standards for new streets.</p>	No
		<p>Policy C2-2.7 Although Hillcrest Street is closed between Imperial Avenue and Imperial Highway to allow emergency vehicular access only, ensure that the link in the Master Plan of Bicycle Routes is maintained, via the Hillcrest Street right-of-way or any appropriate alternative route.</p>	<p>The proposed Project would not preclude the City's ability to maintain the Hillcrest Street link in the Master Plan of Bicycle routes as the proposed Project does not propose changes to Hillcrest Street between Imperial Avenue and Imperial Highway, nor does the proposed Project preclude the City from developing an alternative route.</p>	No
		<p>Policy C2-2.8 Evaluate bikeway system links with the Metro Green Line rail stations and improve access wherever feasible.</p>	<p>The proposed Project would not preclude the City's ability to evaluate bikeway system links within the Metro Green Line rail stations and improve access to the stations as the proposed Project does not suggest changes to bike access at Metro Green Line rail stations.</p>	No
	<p>Objective C2-3 Ensure the provision of a safe and efficient transit system that will offer the residents, workers, and visitors of El Segundo a viable alternative to the automobile.</p>	<p>Policy C2-3.1 Work closely with the Los Angeles County Metropolitan Transportation Authority (MTA), Torrance Municipal Bus Lines, the El Segundo Employers Association (ESEA), and private businesses to expand and improve the public transit service within and adjacent to the City.</p>	<p>The proposed Project would not preclude the City's ability to work with MTA and other transit agencies to expand and improve public transit service within and adjacent to the City as the proposed Project does not propose changes to inter-agency coordination.</p>	No
		<p>Policy C2-3.2 Ensure that transit planning is considered and integrated into all related elements of City planning.</p>	<p>The proposed Project would not preclude the City's ability to ensure that transit planning work is considered and integrated into all related elements of City planning. The proposed Project includes recommendations to improve the transit planning process within the Project Area, and does not suggest changes to the City's transit planning process outside of the Project Area.</p>	No
		<p>Policy C2-3.3 Evaluate and implement feeder bus service through the City where appropriate. Feeder bus service could potentially take commuters from the fixed transit services (rail and bus) in the eastern portion of the City to the industrial and commercial areas to the west. In addition, midday shuttling of workers east of Sepulveda Boulevard to the Downtown retail area should also be maintained.</p>	<p>The proposed Project would not preclude the City's ability to evaluate and implement feeder bus service through the City. The proposed Project includes recommendations to improve the transit planning process within the Project Area and does not suggest changes to the City's transit planning process outside of the Project Area.</p>	No
		<p>Policy C2-3.4 Pursue potential Proposition A and Proposition C funds for bus transit shelters, signing, advertising, and bus turnouts to encourage bus ridership.</p>	<p>The proposed Project would not preclude the City's ability to pursue additional Proposition A and Proposition C funds for bus transit shelters, signing, advertising, and bus turnouts as the proposed Project does not propose new uses for Proposition A and Proposition C funds.</p>	No
		<p>Policy C2-3.5 Continue the Dial-a-Ride operation and City subsidy to serve all residents of El Segundo, especially the elderly and handicapped</p>	<p>The Project includes a recommendation for continuing operation of Dial-a-Ride service within the Project Area.</p>	No
		<p>Policy C2-3.6 Continue to support the Downtown Lunchtime shuttle operation.</p>	<p>The proposed Project includes a recommendation for continuing operation of the Lunchtime Shuttle within the Project Area.</p>	No
		<p>Policy C2-3.7 Explore the feasibility of using excess government right-of-way, purchased property, or land use arrangements for multiple use of existing facilities, in order to establish or construct park-and-ride services of benefit to El Segundo residents and employees.</p>	<p>The proposed Project would not preclude the City's ability to explore using excess government right-of-way, purchased property, or land use arrangements for multiple use of existing facilities, in order to establish or construct park-and-ride services as the proposed Project does not alter the City's park-and-ride policy.</p>	No

Document	Relevant Goals, Policies, or Objectives	Description of Project's Consistency	Conflict Identified?		
		Policy C2-3.8 Encourage the implementation of park-and-ride facilities proximate to the I-405 and I-105 Freeways for shuttle service into El Segundo.	The proposed Project would not preclude the City's ability to implement park-and-ride facilities near the I-405 and I-105 Freeways as the proposed Project is not located adjacent to I-405 or I-105.	No	
		Policy C2-3.9 Investigate all MTA programs which may be beneficial to the City.	The proposed Project would not preclude the City's ability to investigate all MTA programs which may be beneficial to the City as the proposed Project does not suggest changes to the City's cooperation with Metro.	No	
		Policy C2-3.10 Encourage the MTA to provide bike storage facilities at the Metro Green Line rail stations.	The proposed Project is not located adjacent to any Metro Green Line rail stations. The Project would not preclude the City's ability to encourage Metro to provide bike storage facilities at Metro Green Line rail stations as the proposed Project does not alter the bike parking outside of the Project Area.	No	
	Objective C2-4 Ensure the use of Transportation System Management (TSM) measures throughout the City, to ensure that the City's circulation system is as efficient and cost effective as possible.	Policy C2-4.1 Establish and maintain a citywide traffic count program to ensure the availability of data needed to identify necessary operational improvements to the roadway system.	The proposed Project would not preclude the City's ability to maintain a citywide traffic count program as count collection would not be prohibited by the land use buildout or preferred roadway enhancements.	No	
		Policy C2-4.2 Continue to increase operational efficiencies of the transportation system by implementing all appropriate Transportation System Management (TSM) measures, including but not limited to improving design standards, upgrading and coordination of traffic control devices, controlling on-street parking, and using sophisticated electronic control methods to supervise the flow of traffic.	The proposed Project would not preclude the City's ability to implement TSM measures, including but not limited to improving design standards, upgrading and coordination of traffic control devices, controlling on-street parking, and using sophisticated electronic control methods to supervise the flow of traffic.	No	
	Objective C2-5 Ensure the use of Transportation Demand Management (TDM) measures throughout the City, where appropriate, to discourage the single-occupant vehicle, particularly during the peak hours. In addition, ensure that any developments that are approved based on TDM plans incorporate monitoring and enforcement of TDM targets as part of those plans.	Policy C2-5.1 Ensure that Transportation Demand Management (TDM) measures are considered during the evaluation of new developments within the City, including but not limited to ridesharing, carpooling and vanpooling, flexible work schedules, telecommuting and car/vanpool preferential parking.	The proposed Project would not preclude the City's ability to ensure that TDM measures are considered during the evaluation of new developments within the City. The Project is a program-level plan, which enables the buildout of individual land use projects through 2040. TDM would be incorporated based on individual land use project needs.	No	
		Policy C2-5.2 Coordinate activities with neighboring jurisdictions and the El Segundo Employers Association (ESEA) to optimize the effectiveness of Transportation Demand Management (TDM) activities.	The proposed Project would not preclude the City's ability to coordinate activities with neighboring jurisdictions and the ESEA to optimize the effectiveness of TDM activities as the proposed Project does not propose changes to City-level TDM policies.	No	
		Policy C2-5.3 Encourage the provision of preferential parking for high occupancy vehicles wherever possible.	The proposed Project would not preclude the City's ability to encourage the provision of preferential parking for high occupancy vehicles as the proposed Project does not propose changes to City-level TDM policies.	No	
	Goal C3: Development of Circulation Policies that are Consistent with other City Policies Develop a balanced General Plan, coordinating the Circulation Element with all other Elements, ensuring that the City's decision making and planning activities are consistent among all City departments.	Objective C3-1 Ensure that potential circulation system impacts are considered when the City's decision makers and staff are evaluating land use changes.	Policy C3-1.1 Require all new development to mitigate project-related impacts on the existing and future circulation system such that all Master Plan roadways and intersections are upgraded and maintained at acceptable levels of service through implementation of all applicable Circulation Element policies. Mitigation measures shall be provided by or paid for by the project developer.	As a result of SB 743, intersection level of service (LOS) is no longer a criterion used to assess transportation impacts under CEQA.	No
			Policy C3-1.2 The minimum acceptable level of service (LOS) at an intersection is LOS D. Intersections operating at LOS E or F shall be considered deficient. If traffic caused by a development project is forecast to result in an intersection level of service change from LOS D or better to LOS E or F, then the development impact shall be considered significant. If a development project is forecast to result in the increase of intersection volume/capacity ratio (V/C) of 0.02 or greater at any intersection that is forecast to operate at LOS E or F, the impact shall be considered significant.	As a result of SB 743, intersection delay (LOS) is no longer a criterion used to assess transportation impacts under CEQA and cannot be used to determine impacts considered significant.	No
Policy C3-1.3 Limit intersection improvements to feasible improvements that do not affect buildings, freeway supports, or railroad rights-of-way. Such improvements should not include more than three left-turn lanes, four through lanes, and two right-turn lanes on any approach to an intersection			The proposed Project would not preclude the City's ability to limit intersection improvements to feasible improvements that do not affect buildings, freeway supports, or railroad rights-of-way.	No	

Document	Relevant Goals, Policies, or Objectives		Description of Project's Consistency	Conflict Identified?	
		<p>Policy C3-1.4 Encourage development projects that effectively integrate major transportation facilities with land use planning and the surrounding environment. These joint uses will obtain economic and aesthetic benefits of coordinated design, achieve land conservation in space-short urban areas of El Segundo, and maintain neighborhood continuity in built-up areas affected by future major transportation routes.</p>	An overarching purpose of the proposed Project is to encourage development projects that effectively integrate major transportation facilities with land use planning and the surrounding environment within the Project Area.	No	
		<p>Policy C3-1.5 Ensure that transit planning is considered and integrated into all related elements of City planning.</p>	The proposed Project would not preclude the City's ability to ensure that transit planning is considered and integrated into all related elements of City Planning. The Project includes recommendations that would support transit operation and planning.	No	
		<p>Policy C3-1.6 Apply planning principles and Circulation Element goals, objectives, and policies should apply consistently to all land uses in the City.</p>	The proposed Project would not preclude the City's ability to apply planning principles and Circulation Element goals, objectives and policies consistently to all City land uses. The Project would not enable any specific land uses to preclude planning principles.	No	
		<p>Policy C3-1.7 Require submittal and implementation of a Transportation Management Plan (TMP) for all projects within the Urban Mixed-Use area and encourage a TMP for all projects within the northeast quadrant.</p>	The proposed Project would not preclude the City's ability to require the submittal and implementation of a TMP for all projects within the Urban Mixed-Use area and encourage a TMP for all projects within the northeast quadrant. Individual development projects enabled by the Project would still be subject to TMP where necessary.	No	
		<p>Policy C3-1.8 Require the provision of adequate pedestrian and bicycle access for new development projects through the development review process.</p>	The proposed Project would not preclude the City's ability to require the provision of adequate pedestrian and bicycle access for new development projects through the development review process. The Project does not enable developments to override pedestrian or bicycle access provisions in the City's municipal code.	No	
		<p>Policy C3-1.9 Ensure that the driveway stacking distance for multi-family housing is evaluated during the development review process.</p>	The proposed Project would not preclude the City's ability to ensure that the driveway stacking distance for multi-family housing is evaluated during the development review process as the proposed Project does not propose changes to the development process.	No	
	<p>Objective C3-2 Ensure the consideration of the impacts of land use decisions on the City's parking situation.</p>	<p>Policy C3-2.1 Ensure the provision of sufficient on-site parking from all new development.</p>	The proposed Project would not preclude the City's ability to ensure new development provides sufficient parking as the proposed Project includes a development review process aimed at design review.	No	
		<p>Policy C3-2.2 Ensure that the City's parking codes and zoning ordinances are kept up-to-date.</p>	The proposed Project would not preclude the City's ability to keep parking codes and zoning ordinances up to date, as the proposed Project updates the parking codes for the Downtown Specific Plan Area. The Project would not preclude such updates outside of the Downtown Specific Plan Area.	No	
	<p>Goal C4: Compliance with all Federal, State, and Regional Regulations</p> <p>Ensure that the City remains in compliance with all Federal, State, and Regional regulations, remains consistent with the plans of neighboring jurisdictions and thus remains eligible for all potential transportation improvement programs.</p>	<p>Objective C4-1 Cooperate to the fullest extent possible with State, County, and regional planning agencies responsible for maintaining and implementing the Circulation Element to ensure an orderly and consistent development of the entire South Bay region.</p>	<p>Policy C4-1.1 Actively participate in various committees and other planning forums associated with County, Regional, and State Congestion Management Programs.</p>	The proposed project would not preclude the City's ability to actively participate in various committees and other planning forums associated with County, Regional, and State Congestion Management programs as the proposed Project does not propose altering the City's role in County, Regional, or State Congestion Management Programs.	No
			<p>Policy C4-1.2 Ensure that the City remains in compliance with the County, Regional, and State Congestion Management Programs (CMP) through the development of appropriate City programs and traffic impact analyses of new projects impacting the CMP routes of Sepulveda Boulevard, the I-105 Freeway, and the I-405 Freeway.</p>	The proposed Project would not preclude the City's ability to comply with the County, Regional, or State CMP through the development of appropriate City programs and traffic impact analyses of new projects impacting the CMP routes of Sepulveda Boulevard, the I-105 Freeway, and the I-405 Freeway as the proposed Project does not propose changes to Sepulveda Boulevard, I-105, or I-405.	No
<p>Policy C4-1.3 Investigate and evaluate the feasibility and merits of adding more routes that are impacted by external traffic sources, to the County CMP highway system.</p>			The proposed Project would not preclude the City's ability to investigate and evaluate the feasibility and merits of adding more routes that are impacted by external traffic sources, to the County CMP highway system, as the proposed Project does not propose changes to the process by which CMP routes are identified.	No	
<p>Objective C4-2 Ensure that the City's circulation system is consistent with those of neighboring jurisdictions.</p>		<p>Policy C4-2.1 Ensure that new roadway links are constructed as designated in the Circulation Element and link with existing roadways in neighboring jurisdictions to allow efficient access into and out of the City.</p>	The proposed Project would not preclude the City's ability to ensure that new roadway links are constructed as designated in the Circulation Element and link with existing roadways in neighboring jurisdictions to allow efficient access into and out of the City, as the proposed Project does not propose changes to the construction of planned new roadway links.	No	

Document	Relevant Goals, Policies, or Objectives		Description of Project's Consistency	Conflict Identified?	
			Policy C4-2.2 Carefully assess adjacent local agencies' plans to ensure compatibility across political boundaries. This does not imply that such compatibility is a requirement for adoption of the Circulation Element.	The proposed Project does not preclude the City's ability to assess adjacent local agencies' plans to ensure compatibility across political boundaries as the proposed Project does not propose changes to the process by which the City reviews adjacent local agencies' plans.	No
			Policy C4-2.3 Continuously monitor and evaluate Los Angeles International Airport (LAX) master planning and evaluate the impacts of LAX on the City's Circulation Element.	The proposed Project does not preclude the City's ability to continuously monitor and evaluate Los Angeles International Airport (LAX) master planning and evaluate the impacts of LAX on the City's Circulation Element, as the proposed Project does not propose changes to the process by which the City reviews adjacent local agencies' plans.	No
			Policy C4-2.4 Encourage cooperation with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization.	The proposed Project does not preclude the City's ability to cooperate with other governmental agencies to provide adequate vehicular traffic movements on streets and through intersections by means of synchronized signalization as the proposed Project does not propose changes to inter-agency practices.	No
		Objective C4-3 Establish the City's short-term (5-year) Capital Improvement Program (CIP) consistent with the Circulation Element and the entire General Plan, and ensure that the CIP incorporates adequate funding for the City's circulation needs.	Policy C4-3.1 Identify and evaluate potential revenue sources for financing circulation system development and improvement projects.	The proposed Project includes recommendations for the City to identify and evaluate potential revenue sources for financing circulation system development and improvement projects, particularly with regard to parking supply	No
			Policy C4-3.2 Update the City's 1996 Traffic Congestion Mitigation Fee Program, to reflect changes in planned improvements requiring funding changing needs and changes in the construction cost index.	The proposed Project does not preclude the City's ability to update the City's 1996 Traffic Congestion Mitigation Fee Program to reflect changes in planned improvements requiring funding changing needs and changes in the construction cost index as the proposed Project does not propose changes to funding or financing mechanisms.	No
South Bay Bicycle Master Plan²	El Segundo Prioritized Bicycle Projects	Bike Routes	Grand Avenue From West end of Street to Duley Road	Within this segment, the extent of Grand Avenue from Concord Street to Eucalyptus Drive is located within the Project Area. This segment within the Project Area is a designated bike route under existing conditions, and the Project proposes to maintain this designation.	No
			Main Street From Imperial Avenue to El Segundo Boulevard	Within this segment, the extent of Main Street from Mariposa Avenue to El Segundo Boulevard is located within the Project Area. This segment within the Project Area is a designated bike route under existing conditions. The Project proposes a bike lane along this segment, which provides additional striping and signage to support bicycle mobility.	No
			Loma Vista Street – Binder Place - Whiting Street – El Segundo Boulevard From Grand Avenue to Main Street	Within this segment, the extent of El Segundo Boulevard from west of Richmond Street to Main Street is located within the Project Area. The Project proposes no modifications to this segment of El Segundo Boulevard, thus the Project would not preclude the implementation of this facility.	No
		Bike Lane, Bike Route, Bike Path combination	El Segundo Boulevard From Main Street to East City Limits	Within this segment, the extent of El Segundo Boulevard from Main Street to east of Main Street is located within the Project Area. The Project proposes no modifications to this segment of El Segundo Boulevard, thus the Project would not preclude the implementation of this facility.	No
		Bike Friendly Streets	Mariposa Avenue From West end of Street to Sepulveda Boulevard	Within this segment, the extent of Mariposa Avenue from Marketplace Alley to east of Main Street is located within the Project Area. The Project proposes no modifications to this segment of Mariposa Avenue, thus the Project would not preclude the implementation of this facility.	No
			Sheldon Street – Pine Avenue – Eucalyptus Drive From Imperial Avenue to Grand Avenue	Within this segment, the extent of Eucalyptus Drive from Grand Avenue to south of Grand Avenue is located within the Project Area. The Project proposes no modifications to this segment of Eucalyptus Drive, thus the Project would not preclude the implementation of this facility.	No

² South Bay Bicycle Master Plan – Draft Final Plan, August 2011

Appendix C – SED TAZ Inputs for Activity-Based Model (ABM)



Appendix C - Socioeconomic Data TAZ Inputs for ABM

TAZ	Source	Subarea	POP		RES		HH		MFDU		Tot_emp		Ag_emp		Const_emp		Manu_emp		Whole_emp		Ret_emp		Trans_emp		Infor_emp		FIRE_emp		Prof_emp		Educ_emp		ArtEnt_emp		OthSer_emp		PubAdm_emp	
			Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040	Ex	2040
21115100	Land Use Conversion	DSP	187	457	187	457	83	203	83	203	630	1197	0	0	0	0	0	0	0	0	205	339	0	0	0	0	32	32	319	639	36	65	38	122	0	0	0	0
		non-DSP	876	876	876	876	285	286	29	29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Total	1063	1333	1063	1333	368	489	112	232	630	1197	0	0	0	0	0	0	0	0	205	339	0	0	0	0	32	32	319	639	36	65	38	122	0	0	0	0
21115200	Land Use Conversion	DSP	153	558	153	558	68	248	68	248	557	1227	0	0	0	0	0	0	0	0	315	405	0	0	0	0	0	0	171	651	0	44	71	127	0	0	0	0
		non-DSP	833	833	833	833	367	367	350	350	563	645	0	0	0	292	238	0	0	89	91	7	7	0	0	0	0	128	249	0	15	40	40	7	5	0	0	
		Total	986	1391	986	1391	435	615	418	598	1120	1872	0	0	0	292	238	0	0	89	91	7	7	0	0	0	0	128	249	0	15	40	40	7	5	0	0	
21125300	Land Use Conversion	DSP	387	889	387	889	560	844	560	844	861	1248	0	0	0	0	361	114	0	0	7	51	51	0	0	0	0	445	1004	0	68	4	4	0	0	0	0	
		non-DSP	1349	1349	1349	1349	587	587	556	556	861	1248	0	0	0	361	114	0	0	0	7	51	51	0	0	0	0	445	1004	0	68	4	4	0	0	0	0	
		Total	1349	1349	1349	1349	587	587	556	556	861	1248	0	0	0	361	114	0	0	0	7	51	51	0	0	0	0	445	1004	0	68	4	4	0	0	0	0	
21125300	SCAG SED	Total	207	1229	1193	1215	670	892	618	754	754	0	0	0	33	101	70	25	74	70	25	44	53	53	39	37	28	28	39	63	72	29	32	61	65	0	0	

Appendix D – Project Area Existing Parcel Data



Appendix D - Project Area Existing Parcel Data

OBJECTID	AIN	APN	SITE_ADDR	ADJUSTED_GROSS_SF	GROSS_SF	LANDUSE from City	LOT_ACRES	LOT_SF	RES_UNITS	Shape_Length	Shape_Area	ABM Land Use	ULI Model Land Use	ITE Land Use	Lat	Long	TAZ
1	4136016058	4136-016-058	121 W GRAND AVE	51298	51298	STORE BUILDING	0.66	28868		692.1997541	28868.32461				33.91941	-118.41683	2115100
2	4136016057	4136-016-057	300 RICHMOND ST	25442	25442	SUPERMARKET	0.54	23881		618.278912	23881.46106	Free-Standing/Discount Store	Discount Stores/Superstores	850 supermarket	33.91993	-118.41683	2115100
3	4136026039	4136-026-039	141 MAIN ST	704	704	COMMERCIAL (NEC)	0.32	14014		480.1596684	14014.46757	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.91769	-118.41631	2115200
4	4136015011	4136-015-011	403 MAIN ST	1059	2118	STORES & RESIDENTIAL	0.08	3500	1	329.9993859	3499.992407	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.92102	-118.41631	2115100
5	4136015025	4136-015-025	415 MAIN ST	4350	4350	STORE BUILDING	0.24	10500		430.0000129	10500.00268	General Retail	General Retail	Retail (<40 ksf)	33.92144	-118.41631	2115100
6	4136015021	4136-015-021	433 MAIN ST	1275	1275	STORE BUILDING	0.08	3500		330.0000097	3500.000196	General Retail	General Retail	Retail (<40 ksf)	33.92178	-118.41631	2115100
7	4136015019	4136-015-019	447 MAIN ST	2486	2486	STORES & OFFICES	0.08	3500		330.00001	3500.000218	General Office	General Office	Office <25 ksf	33.92164	-118.41631	2115100
8	4136015015	4136-015-015	413 MAIN ST	480	960	STORE BUILDING	0.08	3500	2	330.00001	3500.000218	General Retail	General Retail	Retail (<40 ksf)	33.9213	-118.41631	2115100
9	4136015023	4136-015-023	455 MAIN ST	3987	3987	MEDICAL BUILDING	0.32	14000		480.0006385	13999.99942	Medical Office	Medical/Dental Office		33.92202	-118.41631	2115100
10	4136015010	4136-015-010	401 MAIN ST	10623	2125	STORE BUILDING	0.08	3500	1	330.00001	3500.000219	General Retail	General Retail	Retail (<40 ksf)	33.92096	-118.41631	2115100
11	4136015020	4136-015-020	431 MAIN ST	1500	1500	STORE BUILDING	0.08	3500		330.000011	3500.000217	General Retail	General Retail	Retail (<40 ksf)	33.92171	-118.41631	2115100
12	4136015013	4136-015-013	409 MAIN ST	2208	2208	STORE BUILDING	0.08	3500		330.0000011	3500.000217	General Retail	General Retail	Retail (<40 ksf)	33.92116	-118.41631	2115100
13	4136015022	4136-015-022	439 MAIN ST	1626	1626	RESTAURANT BUILDING	0.08	3500		330.00001	3500.000217	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.92185	-118.41631	2115100
14	4136015018	4136-015-018	425 MAIN ST	1416	1416	OFFICE BUILDING	0.08	3500		330.0000097	3500.000196	General Office	General Office	Office <25 ksf	33.92157	-118.41631	2115100
15	4136015014	4136-015-014	411 MAIN ST	1750	1750	STORE BUILDING	0.08	3500		330.0000097	3500.000196	General Retail	General Retail	Retail (<40 ksf)	33.92123	-118.41631	2115100
16	4136016006	4136-016-006	350 RICHMOND ST	2184	4368	APARTMENT	0.16	7004	8	378.1349771	6862.144919	Multi-Family-Residential	Residential		33.92037	-118.41683	2115100
17	4136015012	4136-015-012	405 MAIN ST	1500	1500	STORES & RESIDENTIAL	0.08	3500		329.9993858	3499.992407	General Retail	General Retail	Retail (<40 ksf)	33.92109	-118.41631	2115100
18	4136016033	4136-016-033	351 MAIN ST	1014	1014	STORE BUILDING	0.08	3503		330.1800069	3502.825306	General Retail	General Retail	Retail (<40 ksf)	33.92054	-118.41631	2115100
19	4136016024	4136-016-024	319 MAIN ST	5550	5550	OFFICE BUILDING	0.16	7008		380.3100378	7008.375214	General Office	General Office	Office <25 ksf	33.91968	-118.41631	2115100
20	4136016029	4136-016-029	333 MAIN ST	3330	3330	STORE BUILDING	0.12	5234		355.1793874	5253.781905	General Retail	General Retail	Retail (<40 ksf)	33.92008	-118.41631	2115100
21	4136016037	4136-016-037	327 MAIN ST	4000	4000	MEDICAL BUILDING	0.16	7005		380.260167	7004.925434	Medical Office	Medical/Dental Office		33.91996	-118.41631	2115100
22	4136016038	4136-016-038	327 MAIN ST	6900	6900	PARKING LOT	0.16	7003		380.1506334	7003.343319				33.92023	-118.41683	2115100
23	4136016031	4136-016-031	343 MAIN ST	6316	6316	FINANCIAL BUILDING	0.24	10507		430.1906371	10507.24417	Bank	Bank (Drive In Branch)		33.92033	-118.41631	2115100
24	4136016035	4136-016-035	361 MAIN ST	1369.5	2739	OFFICE BUILDING	0.08	3500	4	330.0200117	3500.250006	General Office	General Office	Office <25 ksf	33.92075	-118.41631	2115100
25	4136016022	4136-016-022	315 MAIN ST	3500	3500	PARKING LOT	0.08	3504		330.2906535	3503.668136				33.91958	-118.41631	2115100
26	4136016021	4136-016-021	309 MAIN ST	10988	10988	STORES & RESIDENTIAL	0.24	10512		430.2394988	10511.53297	General Retail	General Retail	Retail (<40 ksf)	33.91944	-118.41631	2115100
27	4136016030	4136-016-030	339 MAIN ST	2297	4594	STORES & RESIDENTIAL	0.12	5233	3	355.1700158	5253.31231	Multi-Family-Residential	Residential		33.92018	-118.41631	2115100
28	4136016026	4136-016-026	321 MAIN ST	3550	3550	STORE BUILDING	0.16	7010		380.3500175	7009.526212	General Retail	General Retail	Retail (<40 ksf)	33.91982	-118.41631	2115100
29	4136016032	4136-016-032	347 MAIN ST	2732	2732	STORES & RESIDENTIAL	0.08	3502		330.1700087	3502.125157	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.92047	-118.41631	2115100
30	4136017020	4136-017-020	321 RICHMOND ST	1355	2710	STORES & RESIDENTIAL	0.08	3503	1	330.26939	3503.305936	General Office	General Office	Office <25 ksf	33.91958	-118.41749	2115100
31	4136017050	4136-017-050	327 RICHMOND ST	976	976	STORE BUILDING	0.03	1209		156.2294086	1209.286176	General Retail	General Retail	Retail (<40 ksf)	33.91972	-118.41735	2115100
32	4136017016	4136-017-016	305 RICHMOND ST	1250	1250	STORE BUILDING	0.08	3504		330.269513	3503.905549	General Retail	General Retail	Retail (<40 ksf)	33.91924	-118.41749	2115100
33	4136017053	4136-017-053	227 W GRAND AVE	5968	5968	OFFICE BUILDING	0.15	6607		340.0968192	6605.620864	General Office	General Office	Office <25 ksf	33.91928	-118.41815	2115100
34	4136017054	4136-017-054	227 W GRAND AVE	3850	3850	PARKING LOT	0.09	3852		289.9963105	3850.24164				33.91928	-118.41799	2115100
35	4136017019	4136-017-019	318 RICHMOND ST	1400	2800	TRIPLEX	0.08	3504	4	330.3100412	3504.451468	Townhouse	Residential		33.91951	-118.41749	2115100
36	4136017047	4136-017-047	337 RICHMOND ST	2500	2500	RELIGIOUS	0.16	7006	3	380.2695491	7005.908313	Church	Custom - Church	560 church	33.91986	-118.41749	2115100
37	4136017018	4136-017-018	315 RICHMOND ST	877	1754	STORES & RESIDENTIAL	0.08	3504	3	330.3006675	3503.792939	General Office	General Office	Office <25 ksf	33.91944	-118.41749	2115100
38	4136017057	4136-017-057	219 W GRAND AVE	2202	2202	STORE BUILDING	0.11	4957		310.0123728	4956.408617	General Retail	General Retail	Retail (<40 ksf)	33.91928	-118.41786	2115100
39	4136017043	4136-017-043	201 W GRAND AVE	3500	3500	STORE BUILDING	0.08	3500		330.1001344	3501.24883	General Retail	General Retail	Retail (<40 ksf)	33.91917	-118.41749	2115100
40	4136017046	4136-017-046	363 RICHMOND ST	3530	7060	RELIGIOUS	0.56	24514	1	630.1101753	24513.62278	Church	Custom - Church	560 church	33.92054	-118.41749	2115100
41	4136017027	4136-017-027	343 RICHMOND ST	1446.5	2893	OFFICE BUILDING	0.08	3501	4	330.1593871	3501.381049	General Office	General Office	Office <25 ksf	33.92006	-118.41749	2115100
42	4136016020	4136-016-020	105 W GRAND AVE	4505	9010	STORES & RESIDENTIAL	0.24	10508	8	430.1102973	10508.16712	General Retail	General Retail	Retail (<40 ksf)	33.91924	-118.41631	2115100
43	4136017052	4136-017-052	331 RICHMOND ST	1509.5	3019	STORES & RESIDENTIAL	0.16	6994	5	380.3112606	6994.371855	General Office	General Office	Office <25 ksf	33.91982	-118.41749	2115100
44	4136024009	4136-024-009		3500	3500	PARKING LOT	0.08	3501		330.0903172	3501.123956				33.91825	-118.41749	2115200
45	4136024014	4136-024-014	225 RICHMOND ST	1955	1955	STORE BUILDING	0.08	3502		330.0797088	3501.566237	General Retail	General Retail	Retail (<40 ksf)	33.91866	-118.41749	2115200
46	4136024001	4136-024-001	210 W GRAND AVE	3870	3870	STORE BUILDING	0.14	6179		368.3396693	6179.466931	General Retail	General Retail	Retail (<40 ksf)	33.9188	-118.41802	2115200
47	4136024011	4136-024-011	215 RICHMOND ST	4150	4150	CLUB	0.16	7002		380.0897629	7002.183695	General Office	General Office	Office <25 ksf	33.91842	-118.41749	2115200
48	4136024010	4136-024-010	211 RICHMOND ST	2776	2776	STORE BUILDING	0.08	3501		330.1103172	3501.373956	General Retail	General Retail	Retail (<40 ksf)	33.91832	-118.41749	2115200
49	4136024008	4136-024-008	209 RICHMOND ST	2150	4300	STORES & RESIDENTIAL	0.08	3501	5	330.0703172	3500.873956	General Office	General Office	Office <25 ksf	33.91818	-118.41749	2115200
50	4136025001	4136-025-001	118 W GRAND AVE	8198	8198	STORES & OFFICES	0.19	8349		399.2901854	8349.166265	General Office	General Office	Office <25 ksf	33.91877	-118.41683	2115200
51	4136025900	4136-025-900		0	17486	PARKING LOT	0.4	17486		529.820195	17486.44358				33.91811	-118.41683	2115200
52	4136024012	4136-024-012	221 RICHMOND ST	2250	2250	RESTAURANT BUILDING	0.08	3500		330.0397257	3500.490074	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.91852	-118.41749	2115200
53	4136024013	4136-024-013	223 RICHMOND ST	2500	2500	RESTAURANT BUILDING	0.08	3501		330.060354	3500.747807	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.91859	-118.41749	2115200
54	4136026001	4136-026-001	146 RICHMOND ST	1600	3200	STORES & RESIDENTIAL	0.16	7024	2	380.4212493	7023.99769	Townhouse	Residential		33.91776	-118.41683	2115200
55	4136025002	4136-025-002		3500	3500	PARKING LOT	0.08	3501		330.0603193	3500.747908				33.91866	-118.41683	2115200
56	4																

Appendix D - Project Area Existing Parcel Data

OBJECTID	AIN	APN	SITE_ADDR	ADJUSTED_GROSS_SF	GROSS_SF	LANDUSE FROM City	LOT_ACRES	LOT_SF	RES_UNITS	Shape_Length	Shape_Area	ABM Land Use	ULI Model Land Use	ITE Land Use	Lat	Long	TAZ
86	4136027017	4136-027-017	135 RICHMOND ST	1000	1000	LIGHT INDUSTRIAL	0.08	3503		330.2697073	3502.755582	General Office	Office <25 ksf	110 general light industrial	33.91745	-118.41748	2115200
87	4136027019	4136-027-019	143 RICHMOND ST	812.5	1625	STORES & RESIDENTIAL	0.08	3504		330.290317	3503.623957	Single Family Residential	Residential		33.91766	-118.41748	2115200
88	4136026009	4136-026-009		0	0	PARKING LOT	0.08	3503		330.2403377	3503.001086				33.91711	-118.41748	2115200
89	4136027021	4136-027-021	147 RICHMOND ST	1076	1076	OFFICE BUILDING	0.08	3503		330.1809085	3502.807158	General Office	Office <25 ksf	715 single tenant office building	33.91778	-118.41749	2115200
90	4136026021	4136-026-021		0	0	PARKING LOT	0.08	3503		330.2603184	3502.677406				33.91669	-118.41629	2115200
91	4136027016	4136-027-016		1364	1364	COMMERCIAL LOT	0.08	3504		330.2809653	3504.116174	General Office	Office <25 ksf		33.91738	-118.41748	2115200
92	4136027011	4136-027-011	115 RICHMOND ST	1321.5	2643	STORES & RESIDENTIAL	0.16	7005	1	380.1703425	7004.948314	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.91694	-118.41748	2115200
93	4136027034	4136-027-034	123 RICHMOND ST	1245	2490	STORES & RESIDENTIAL	0.32	14009	1	480.1803106	14009.42343	General Retail	Retail (<40 ksf)		33.91714	-118.41748	2115200
94	4136027032	4136-027-032	127 RICHMOND ST B	1280	2560	STORES & RESIDENTIAL	0.32	14009	1	480.1803106	14009.42343	General Retail	Retail (<40 ksf)		33.91714	-118.41748	2115200
95	4136027033	4136-027-033	125 RICHMOND ST	1245	2490	STORES & RESIDENTIAL	0.32	14009	1	480.1803106	14009.42343	General Retail	Retail (<40 ksf)		33.91714	-118.41748	2115200
96	4136026023	4136-026-003		0	0	PARKING LOT	0.08	3504		330.2909895	3503.669832				33.91752	-118.41683	2115200
97	4136026017	4136-026-017	102 RICHMOND ST	0	0	PARKING LOT	0.16	6987		379.9298105	6986.711192				33.91652	-118.41682	2115200
98	4136027035	4136-027-035	121 RICHMOND ST	1280	2560	STORES & RESIDENTIAL	0.32	14009	1	480.1803106	14009.42343	General Retail	Retail (<40 ksf)		33.91714	-118.41748	2115200
99	4136027020	4136-027-020	145 RICHMOND ST	1032	2064	STORES & RESIDENTIAL	0.08	3504	2	330.3203189	3504.000006	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.91773	-118.41749	2115200
100	4133001002	4133-001-002		3000	3000	RELIGIOUS	0.08	3500		330.0503646	3500.058057	Church	Custom - Church	560 church	33.92288	-118.41558	2115100
101	4133001001	4133-001-001	540 MAIN ST	16882	16882	RELIGIOUS	0.72	31262		726.5708927	31262.16676	Church	Custom - Church	560 church	33.92322	-118.41559	2115100
102	4133001003	4133-001-003		3000	3000	RELIGIOUS	0.08	3502		330.0903685	3501.708406	Church	Custom - Church	560 church	33.92281	-118.41558	2115100
103	4133001008	4133-001-008	502 MAIN ST	661	1322	OFFICE BUILDING	0.08	3501	1	330.0603646	3501.330507	General Office	Office <25 ksf	715 single tenant office building	33.92224	-118.41558	2115100
104	4133001004	4133-001-004	520 MAIN ST	5499	5499	CLUB	0.16	7003		380.1004766	7003.093764	General Office	Office <25 ksf		33.92271	-118.41558	2115100
105	4133001007	4133-001-007	508 MAIN ST	3416	3416	OFFICE BUILDING	0.08	3501		330.030426	3500.959056	General Office	Office <25 ksf	715 single tenant office building	33.92247	-118.41558	2115100
106	4133001009	4133-001-009	500 MAIN ST	1014	2028	OFFICE BUILDING	0.08	3501	1	330.0404753	3500.512606	General Office	Office <25 ksf	715 single tenant office building	33.92233	-118.41558	2115100
107	4133001021	4133-001-021	512 MAIN ST	3160.5	6321	OFFICE & RESIDENTIAL	0.16	7001	8	380.0405481	7000.696062	General Retail	Retail (<40 ksf)		33.92257	-118.41558	2115100
108	4135001001	4135-001-001	150 MAIN ST	883	883	OFFICE BUILDING	0.08	3520		330.4307507	3520.328406	General Office	Office <25 ksf	715 single tenant office building	33.91778	-118.41557	2115200
109	4135001011	4135-001-011		0	0	PARKING LOT	0.08	3503		330.2403497	3503.000007				33.91711	-118.41557	2115200
110	4135001012	4135-001-012		3000	3000	PARKING LOT	0.08	3503		330.2103477	3502.626105				33.91704	-118.41557	2115200
111	4135001013	4135-001-013		3000	3000	PARKING LOT	0.08	3503		330.2303384	3503.448407				33.91697	-118.41557	2115200
112	4135001019	4135-001-019		3000	3000	PARKING LOT	0.08	3503		330.2705077	3503.384907				33.91656	-118.41557	2115200
113	4135001016	4135-001-016		3000	3000	PARKING LOT	0.08	3504		330.3403349	3504.252106				33.91676	-118.41557	2115200
114	4135002002	4135-002-002	110 E GRAND AVE	3395	3395	STORES & RESIDENTIAL	0.08	3589		380.8275376	3589.258558	General Retail	Retail (<40 ksf)		33.91877	-118.4154	2115200
115	4135001035	4135-001-035	140 MAIN ST	5000	5000	LIGHT INDUSTRIAL	0.16	7008		380.3203497	7007.750013	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant	110 general light industrial	33.91769	-118.41557	2115200
116	4135001014	4135-001-014		3000	3000	PARKING LOT	0.08	3503		330.220319	3502.750006				33.9169	-118.41557	2115200
117	4135001038	4135-001-038	134 MAIN ST	11277	11277	STORE BUILDING	0.24	10510		430.2703211	10510.37397	General Retail	Retail (<40 ksf)		33.91738	-118.41557	2115200
118	4135001039	4135-001-039	136 MAIN ST	23785	4757	OFFICE BUILDING	0.16	7008	5	380.3003364	7008.324714	General Office	Office <25 ksf	712 small office building	33.91755	-118.41557	2115200
119	4135002021	4135-002-021	208 MAIN ST	4925	3000	COMMERCIAL BUILDING	0.08	3501		330.0603499	3500.747806	Museum	Museum		33.91818	-118.41557	2115200
120	4135001015	4135-001-015		3000	3000	PARKING LOT	0.08	3504		330.290477	3503.615556				33.91688	-118.41557	2115200
121	4135002010	4135-002-010	205 STANDARD ST	2028	4056	APARTMENT	0.16	7003	7	380.098344	7002.80782	Multi-Family-Residential	Residential		33.91815	-118.41505	2115200
122	4135002004	4135-002-004	218 MAIN ST	1910	1910	SERVICE STATION	0.16	7003		380.1003366	7002.820213	General Retail	Custom - Gas Station		33.91842	-118.41557	2115200
123	4135002006	4135-002-006	210 MAIN ST	1200	1200	RESTAURANT BUILDING	0.08	3500		330.0503346	3500.047707	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.91825	-118.41557	2115200
124	4135001017	4135-001-017		3000	3000	PARKING LOT	0.08	3503		330.270333	3503.378157				33.9167	-118.41557	2115200
125	4135002020	4135-002-020	130 E GRAND AVE	16292	16292	SHOPPING CENTER	0.91	39738	0	856.9917921	39737.97351	General Retail	Retail (40-150 ksf)		33.91861	-118.41504	2115200
126	4135001018	4135-001-018		3000	3000	PARKING LOT	0.08	3504		330.3104302	3504.442156				33.91663	-118.41557	2115200
127	4135002008	4135-002-008	201 STANDARD ST	3342.5	6685	OFFICE & RESIDENTIAL	0.08	3518	5	330.2701833	3517.749556	Multi-Family-Residential	Residential		33.91797	-118.41505	2115200
128	4135002022	4135-002-022	200 MAIN ST	2907	5814	STORES & OFFICES	0.24	10503		430.0503561	10502.72202	General Office	Office <25 ksf		33.91804	-118.41557	2115200
129	4135004001	4135-004-001	450 MAIN ST	1270	1270	RESTAURANT BUILDING	0.16	7000		380.0000114	6999.993813	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.92209	-118.41559	2115100
130	4135004002	4135-004-002	446 MAIN ST	1920	1920	STORE BUILDING	0.08	3500		330.000001	3500.0000217	General Retail	Retail (<40 ksf)		33.92199	-118.41559	2115100
131	4135001040	4135-001-040	130 MAIN ST	848	1696	STORE BUILDING	0.16	7007	1	380.2703344	7006.948463	General Retail	Retail (<40 ksf)		33.91721	-118.41557	2115200
132	4135002009	4135-002-009		2745	5490	COMMERCIAL LOT	0.08	3501	3	330.0583235	3500.739365	Townhouse	Residential		33.91804	-118.41505	2115200
133	4135002005	4135-002-005	214 MAIN ST	2000	2000	RESTAURANT BUILDING	0.08	3502		330.0803326	3501.574106	General Retail	Retail (<40 ksf)		33.91832	-118.41557	2115200
134	4135004004	4135-004-004	434 MAIN ST	1255	2510	STORES & RESIDENTIAL	0.08	3500	2	330.0000097	3500.000196	Townhouse	Residential		33.92185	-118.41559	2115100
135	4135004005	4135-004-005	428 MAIN ST	1488	2976	STORES & RESIDENTIAL	0.16	7000	1	380.0006355	7000.008224	Single Family Residential	Residential		33.92175	-118.41559	2115100
136	4135004028	4135-004-028	400 MAIN ST	8148	8148	STORE BUILDING	0.4	17500		530.00064	17500.01425	General Retail	Retail (<40 ksf)		33.92109	-118.41558	2115100
137	4135004007	4135-004-007	424 MAIN ST	2640	2640	STORE BUILDING	0.08	3500		330.00001	3500.000218	General Retail	Retail (<40 ksf)		33.92157	-118.41559	2115100
138	4135004009	4135-004-009	410 MAIN ST	1630	1630	RESTAURANT BUILDING	0.08	3500		330.0000097	3500.000197	High-Turnover Sit- Down Restaurant	Fine/Casual Dining Restaurant		33.9213	-118.41558	2115100
139	4135004006	4135-004-006	426 MAIN ST	3117	6234	STORES & RESIDENTIAL	0.08	3500	5	330.0006339	3500.008007	General Office	Office <25 ksf		33.92164	-118.41559	2115100
140	4135004008	4135-004-008	422 MAIN ST	1260	2520	STORES & RESIDENTIAL	0.08	3500	3	330.0000097	3500.000195	General Retail	Retail (<40 ksf)		33.92151	-118.41559	2115100
141	4135002019	4135-002-019	222 MAIN ST	15000	15000	SERVICE STATION	0.38	16616		564.7791009	16623.5755	General Retail	Custom - Gas Station		33.91867	-118.41561	2115200

Appendix E – The Natelson Dale Group, Inc. (TNDG) Real Estate Market Report



M E M O R A N D U M			
TO:	Jami Williams Debbie Jewell RRM Design Group	DATE:	April 27, 2022
FROM:	Roger Dale, Principal Alan Levenson, Senior Associate The Natelson Dale Group, Inc. (TNDG)	FILE:	#4165
SUBJECT:	Real Estate Market Overview and Long-range Demand Projections for El Segundo Downtown Specific Plan Update		

This memorandum and the attached data tables provide a summary of TNDG’s real estate demand projections for the Downtown Specific Plan (DTSP) area in El Segundo. The market overview is not intended to be a full-blown market study to define the feasibility of specific development projects, but provides a planning-level analysis of real estate absorption potentials in the study area. In particular, the analysis forecasts long term (20-year) development demand for the following land uses:

- Retail/restaurant
- General office
- Medical office
- Multi-family residential

The market forecasts are based on customized versions of TNDG’s demand projection models, and also reflect the existing downtown business mix in El Segundo (and in three comparison cities). For each land use, TNDG has forecasted potential citywide demand and then estimated the market shares or “capture rates” potentially achievable with the DTSP area.

Summary of Market Demand Projections

Summary Table A (on the next page) provides a brief overview of the market demand projections. Potential demand within the DTSP area (through 2040) is projected as follows (rounded):

- Retail/restaurant space – 70,000 to 170,000 square feet
- General office – 120,00 to 250,00 square feet
- Medical office – 25,000 square feet
- Multi-family residential – 200 to 375 units

Summary Table A
Overview of Market Demand Projections (through 2040)
El Segundo and Downtown Specific Plan Area

Land Use	Citywide Demand, through 2040		DTSP Demand, through 2040		Basis/Key Assumptions for Demand Scenarios	
	Baseline	Aggressive	Baseline	Aggressive	Baseline	Aggressive
Retail/restaurant (square feet)	465,000	1,045,000	69,500	166,500	El Segundo's percentage share of regional (5-mile trade area) demand will remain constant	El Segundo's percentage share of regional demand will grow over time
General office (square feet)	770,000	2,500,000	115,500	250,000	Baseline forecasts reflect modest employment growth projected by SCAG	Aggressive forecasts reflect a continuation of El Segundo's office absorption rates over past 10 years
Medical office (square feet)	160,000	160,000	24,000	24,000	Medical office demand is assumed to be the same for baseline and aggressive scenarios (since it is assumed to be primarily a resident-serving land use, with limited potentials to capture regional demand)	
Multi-family residential (dwelling units)	500	750	200	375	Citywide forecast generally corresponds to City's RHNA requirements	Baseline projections increased by 50% to reflect potential expansion in zoning capacity

Source: The Natelson Dale Group, Inc. (TNDG).

Tables 1a and 1b on the next two pages provide an abbreviated summary of TNDG's 20-year demand projections for the DTSP area. Table 1a provides *baseline* projections and Table 1b provides more *aggressive* projections. Assumptions underlying the baseline and aggressive forecasts for each land use include the following:

- **Retail/restaurant.** The baseline scenario for retail/restaurant demand reflects the assumption that El Segundo's capture rates of demand from the regional trade area (defined for these purposes as a 5-mile radius) will remain constant over the next 20 years. Whereas the overall "pool" of regional demand will grow somewhat due to projected (relatively modest) population growth, El Segundo's *share* of total demand would remain constant in percentage terms. Under the aggressive retail/restaurant scenario, El Segundo's capture rates of local and regional demand are assumed to increase. Overall growth in regional demand would be the same as under the baseline scenario, but El Segundo's percentage shares would increase (as detailed in appendices A and B).
- **Office.** The baseline office demand projections are tied to the relatively modest employment growth rates projected for El Segundo in the Southern California Association of Governments (SCAG) regional demographic forecast for the period 2020-2045. The aggressive office demand forecasts assume that El Segundo would achieve an annual office absorption rate on par with recent historic (2010-2020) trends.
- **Residential.** The baseline residential demand projections reflect a relatively modest level of new housing development and are based on the Regional Housing Needs Allocation (RHNA) numbers for El Segundo. The aggressive residential demand projections have been derived by TNDG to reflect the more robust market conditions that would potentially exist with expanded residential zoning capacity in El Segundo.

Table 1a
Potential Demand for New Development, 2020-2040 (BASELINE SCENARIO)
El Segundo Downtown Specific Plan Area

Land Use	Citywide Demand (Rounded)	Potential Downtown Capture Rate	Total Downtown Demand
Retail (square feet)			
Restaurant	55,000	30%	16,500
Grocery	25,000	30%	7,500
GAFO (1)	275,000	10%	27,500
Hardware/Auto Parts	60,000	5%	3,000
Services	<u>50,000</u>	30%	<u>15,000</u>
Total	465,000		69,500
Office (square feet)			
General Office	770,000	15%	115,500
Medical Office	160,000	15%	24,000
Residential (dwelling units) (2)			
	500	40%	200
(1) GAFO = <u>G</u> eneral Merchandise, <u>A</u> pparel, <u>F</u> urniture, and <u>O</u> ther/Specialty retail sales categories.			
(2) The Pacific Coast Commons mixed-use project (with a total of 263 residential units) will absorb a significant portion of project citywide housing demand. This project (located outside the DTSP area) was approved by the El Segundo City Council on March 15, 2022.			

Source: TNDG.

Table 1b
Potential Demand for New Development, 2020-2040 (AGGRESSIVE SCENARIO)
El Segundo Downtown Specific Plan Area

Land Use	Citywide Demand (Rounded)	Potential Downtown Capture Rate	Total Downtown Demand
Retail (square feet)			
Restaurant	155,000	30%	46,500
Grocery	70,000	30%	21,000
GAFO (1)	660,000	10%	66,000
Hardware/Auto Parts	60,000	5%	3,000
Services	<u>100,000</u>	30%	<u>30,000</u>
Total	1,045,000		166,500
Office (square feet)			
General Office	2,500,000	10%	250,000
Medical Office	160,000	15%	24,000
Residential (dwelling units) (2)			
	750	50%	375
(1) GAFO = <u>G</u> eneral Merchandise, <u>A</u> pparel, <u>F</u> urniture, and <u>O</u> ther/Specialty retail sales categories.			
(2) The Pacific Coast Commons mixed-use project (with a total of 263 residential units) will absorb a significant portion of project citywide housing demand. This project (located outside the DTSP area) was approved by the El Segundo City Council on March 15, 2022.			

Key Market Conditions Influencing Downtown El Segundo’s Development Potentials

Future development opportunities within the Downtown Specific Plan area will be influenced by the following existing and foreseeable market conditions:

- Retail and office demand in El Segundo reflect the City’s unique status as a small residential community with a massive daytime employment population. Whereas the City’s resident population in 2019¹ was approximately 16,800 persons, in 2019 there were an estimated 73,800 jobs in the City. These numbers equate to approximately 4.4 jobs per resident. In contrast, the jobs-per-resident ratios in the neighboring cities of Culver City, Hermosa Beach, and Manhattan Beach were 1.9, 0.4 and 0.6, respectively (and the overall average for Los Angeles County was 0.5).

¹ The analysis uses 2019 as the base year for the retail demand analysis, in order to avoid distortions caused by the COVID-19 pandemic (and assumed to be temporary for purposes of the long-term forecasts).

- Due to El Segundo's extraordinary jobs/resident ratio, the City supports far greater retail sales and has far more office space than would be typical for a residential community of its size. Taxable sales in El Segundo in 2019 were \$36,500 per resident compared to the countywide average of \$12,000. Among the three comparison cities considered in this study, only Culver City had higher taxable sales per capita (\$39,900); per capita taxable sales in Hermosa Beach and Manhattan Beach in 2019 were \$12,200 and \$19,200, respectively.
- El Segundo has an existing inventory of 17.8 million square feet of office space, representing nearing 5% of all office space in Los Angeles County. In contrast, the City's population represents only 0.2% of the Los Angeles County total, which again underscores El Segundo's very strong market position for non-residential development. A key implication of this strong market position is that future retail and office development opportunities in El Segundo will not specifically be constrained by *resident* population growth (which is expected to be minimal, according to the official SCAG forecast), but will be more broadly support by regional population increases and growth in the larger Westside/South Bay economy.
- After gradually recovering from high-vacancy conditions during the Great Recession, the Los Angeles County office market has experienced significant new headwinds due to the COVID-19 pandemic. Countywide, these impacts have translated to lowered transaction volume, rising vacancy levels and slower rent growth (all of which discourage development of new space).
- The impact of the pandemic shutdown on the office market continues to take shape, and the extent to which reduced demand for office space will become a permanent condition (due to an increase in remote workers) is currently unclear. For planning purposes, the office market demand analysis summarized below (and detailed in Appendix C) assumes a gradual return to "normal" conditions of projected employment growth translating to demand for new office space. However, a more permanent "Work from Home" (WFH) workforce would clearly reduce the demand for new office space.
- Future housing demand in El Segundo (under the baseline and the aggressive scenarios considered in this analysis) is expected to be in the range of 500-750 units citywide over the next 20 years, representing growth of approximately 25-38 units per year. These annual levels of development would exceed recent historic growth rates (about 14 years per year between 2010 and 2020). In order to achieve these accelerated levels of development, the City will need to expand zoning capacity for higher-density housing.

Summary of Retail Demand Analysis (Appendices A and B)

Table 2a below provides a summary of TNDG's retail demand analysis for the *baseline* scenario. This scenario assumes that El Segundo's capture rates of demand from the regional trade area (defined for these purposes as a 5-mile radius) will remain constant over the next 20 years. Whereas the overall "pool" of regional demand will grow somewhat due to projected population growth, El Segundo's *share* of total demand would remain constant in percentage terms.

Table 2a
Net Demand for New Retail Space, 2025-2040 (BASELINE SCENARIO)
City of El Segundo

Retail Category (square feet by year)	2025	2030	2035	2040
GAFO	240,049	252,857	264,721	276,695
Food and Beverage (grocery stores)	21,614	23,544	25,165	26,798
Food Service and Drinking (restaurants)	44,578	47,956	51,114	54,303
Bldg. Matrl. and Garden Equip. and Supplies	38,089	38,725	39,259	39,798
Auto Parts	21,737	21,938	22,107	22,278
Services Space @ 10% of Total	36,607	38,502	40,237	41,987
Grand Total	402,673	423,522	442,603	461,858

Source: TNDG.

Table 2b below provides a summary of TNDG's retail demand analysis for the *aggressive* scenario. This scenario assumes that El Segundo's capture rates of local and regional demand would increase slightly over time. Overall growth in regional demand would be the same as under the baseline scenario, but El Segundo's percentage shares would increase.

Table 2b
Net Demand for New Retail Space, 2025-2040 (AGGRESSIVE SCENARIO)
City of El Segundo

Retail Category (square feet by year)	2025	2030	2035	2040
GAFO	611,818	628,487	644,099	659,860
Food and Beverage (grocery stores)	65,450	67,861	69,968	72,093
Food Service and Drinking (restaurants)	142,073	146,469	150,620	154,812
Bldg. Matrl. and Garden Equip. and Supplies	38,089	38,725	39,259	39,798
Auto Parts	21,737	21,938	22,107	22,278
Services Space @ 10% of Total	87,917	90,348	92,605	94,884
Grand Total	967,082	993,828	1,018,659	1,043,724

Source: TNDG.

Summary of Office Demand Analysis (Appendix C)

Table 3 below provides a summary of TNDG’s baseline demand projections for general and medical office space. Table 4 provides the aggressive office demand scenario. The baseline scenario is driven by SCAG projections for future employment growth in the City. The aggressive scenario reflects a continuation of El Segundo’s recent historic (2010-2020) absorption rate for office space.²

Table 3
Demand for New Office Space, 2020-2040 (BASELINE SCENARIO)
City of El Segundo

Variable	2020-2030	2030-2040	Total
Demand Projections (square feet)			
General Office	349,470	422,840	772,310
Medical Office (over and above general office demand)	73,389	88,796	162,185

Source: TNDG.

Table 4
Demand for New Office Space, 2020-2040 (AGGRESSIVE SCENARIO)
City of El Segundo

Variable	2020-2030	2030-2040	Total
Demand Projections (square feet)			
General Office	1,238,225	1,238,225	2,476,450
Medical Office (over and above general office demand) ³	73,389	88,796	162,185

Source: TNDG.

² Estimated at approximately 124,000 square feet per year (annual average for 2010-2020).

³ Demand for medical office space is projected to be the same for both the baseline and aggressive scenarios.

Housing Market Analysis

As a starting point for projecting potential housing demand in El Segundo, TNDG reviewed the most recent demographic forecasts for El Segundo from the Southern California Association of Governments (SCAG)⁴. The SCAG forecasts indicate that El Segundo will reach approximately 7,332 households by 2045. There are currently (as of 2020) 7,077 households⁵ in the city. Thus, based on the SCAG projections, El Segundo would experience a net increase of approximately 255 households. Assuming a standard housing vacancy factor of 5%, the 255 new households would translate to demand for construction of approximately 268 new housing units, or about *11 units per year* during the 2020-45 SCAG forecast period. In comparison, Table 5 shows that new residential development averaged about 14 dwelling units per year in the City for the 11-year period between 2010 and 2020 (according to U.S. Census residential permit data). Although the historical average is generally consistent with the SCAG forecast, it should be noted that this was a period without official State policy to strongly encourage new residential development.

Table 5
Residential Building Permit Unit Totals by Building Unit Size, 2010-2020
City of El Segundo

Building Unit Size	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	11-yr Avg
1 Unit	3	3	14	13	0	5	0	25	41	8	14	11.5
2 Units	0	8	0	6	0	0	0	0	0	0	0	1.3
3-4 Units	0	0	0	3	0	0	0	3	0	3	4	1.2
5+ Units	0	0	0	0	0	0	0	0	0	0	0	0.0
Total	3	11	14	22	0	5	0	28	41	11	18	13.9

Source: U.S. Census Bureau, Place Level Residential Building Permit Statistics; TNDG.

Given that a single planned development project (Pacific Coast Commons)⁶ will account for nearly all of the housing growth projected by SCAG for the next 20 years, TNDG believes that the SCAG forecasts significantly understate the amount of new housing development that could be captured in El Segundo under favorable market/policy conditions. In particular, the SCAG forecasts are largely informed by the scarcity of available land for new development. Thus, these official forecasts are likely to substantially underrepresent actual market demand given the potential to redevelop existing non-residential development into higher density residential development. Indeed, just meeting the City’s RHNA allocation requires the City to plan for the

⁴ Forecasts from the 2020-2045 Regional Transportation Plan (RTP) / Sustainable Communities Strategy (SCS), with adjustments from the 6th cycle RHNA Allocation Plan, March 4, 2021.

⁵ Official count from the 2020 U.S. Census.

⁶ Pacific Coast Commons was approved by the El Segundo City Council on March 15, 2022 and will include 263 multi-family residential units.

capacity to build 492 new dwelling units, which would represent annual development of about 20 units if spread over the 2020-45 SCAG forecast period.

TNDG believes that City’s RHNA target (approximately 500 units) represents a conservative baseline for the level of housing demand in El Segundo over the next 20 years. Given the potential to increase allowed residential densities in targeted areas (including development opportunities currently being considered for the Civic Center area within the DTSP), TNDG believes it is appropriate for planning purposes to also consider a more aggressive housing forecast in which 20-year development would exceed the baseline forecast by 50% (i.e., for a total of 750 units). Table 6 below summarizes the baseline and aggressive scenarios; the SCAG forecasts are also shown for context.

Table 6
Demand for New Residential Dwelling Units, 2020-2040
City of El Segundo

Forecast Scenario	Totals
<i>SCAG Forecast (for context)</i>	
2020-45 SCAG Forecasted Household Growth	255
Effective Dwelling Unit Growth @ 5% Vacancy	268
Projected Growth per Year	11
2020-40 Forecast New Dwelling Units	215
<i>Baseline Scenario</i>	
2020-45 RHNA Adjusted Dwelling Unit Growth	492
Projected Growth per Year	20
2020-40 Forecast New Dwelling Units	394
Allowance for market demand above RHNA requirement	<u>106</u>
Total potential demand, 2020-40	500
<i>Aggressive Scenario</i>	
Baseline forecast	500
Adjustment (50%) to account for potential new zoning capacity	<u>250</u>
Total potential demand, 2020-40	750

Source: TNDG; SCAG, 2020-45 regional forecast and 6th cycle RHNA.

Comparative Evaluation of Downtown Tenant Mix

As part of the process of evaluating the competitiveness of El Segundo’s downtown, TNDG compiled detailed inventories of all retail, entertainment and other “storefront” commercial tenants in El Segundo and three “comparison” downtowns. This information is summarized in Tables 7 and 8 below and detailed in Appendix D. The three comparison downtowns were: Culver City, Hermosa Beach and Manhattan Beach.

**Table 7
Summary of Storefront Land Uses by Major Category
Selected Downtowns**

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach
Restaurants	53	38	47	41
Other Retail	21	17	33	63
Entertainment	1	1	1	-
Services/Offices	120	21	56	35
Automobile-related	2	-	-	-
Vacant Spaces	9	5	9	4
Grand Total, All Tenant Types	206	82	146	143

Source: TNDG

**Table 8
Percentage Breakdown of Storefront Land Uses by Category
Selected Downtowns**

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach	Average (other towns)
Restaurants	25.7%	46.3%	32.2%	28.7%	34.0%
Other Retail	10.2%	20.7%	22.6%	44.1%	30.5%
Entertainment	0.5%	1.2%	0.7%	0.0%	0.5%
Services/Offices	58.3%	25.6%	38.4%	24.5%	30.2%
Automobile-related	1.0%	0.0%	0.0%	0.0%	0.0%
Vacant Spaces	4.4%	6.1%	6.2%	2.8%	4.9%
Grand Total, All Tenant Types	100.0%	100.0%	100.0%	100.0%	100.0%

Source: TNDG

Table 9
Number of Retail Tenants by Category
Selected Downtowns

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach
Apparel	1	2	10	37
Eating & Drinking	53	38	47	41
Food	2	4	4	4
Furnishings & Appliances	3	1	1	4
Drugstores/Discount Stores	2	-	-	-
Hardware	2	1	1	-
Specialty	11	9	17	18
Grand Total, Retail	74	55	80	104

Source: TNDG

Table 10
Percentage Breakdown of Retail Tenants by Category
Selected Downtowns

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach	Average (other towns)
Apparel	1.4%	3.6%	12.5%	35.6%	20.5%
Eating & Drinking	71.6%	69.1%	58.8%	39.4%	52.7%
Food	2.7%	7.3%	5.0%	3.8%	5.0%
Furnishings & Appliances	4.1%	1.8%	1.3%	3.8%	2.5%
Drugstores/Discount Stores	2.7%	0.0%	0.0%	0.0%	0.0%
Hardware	2.7%	1.8%	1.3%	0.0%	0.8%
Specialty	14.9%	16.4%	21.3%	17.3%	18.4%
Grand Total, Retail	100.0%	100.0%	100.0%	100.0%	100.0%

Source: TNDG

Table 11
Number of Retail Tenants by Sub-Category
Selected Downtowns

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach
<u>Apparel</u>				
Women's Apparel	1	-	5	18
Men's Apparel	-	2	1	1
Children's Apparel	-	-	1	1
Other Apparel	-	-	2	14
Shoes	-	-	1	3
<u>Eating & Drinking</u>				
Fine Dining	-	-	1	5
Casual Dining	33	24	36	23
Upscale Fast Food	2	7	2	-
Other Fast Food	9	-	-	2
Bakery	1	-	-	3
Ice Cream/Yogurt/Juice	4	2	5	4
Coffee/Tea	2	4	4	5
Bar	2	1	-	4
<u>Entertainment/Recreation</u>				
Live Theater	1	-	1	-
Movie Theater	-	1	-	-
<u>Food Stores</u>				
Supermarket	-	-	-	1
Convenience Market	-	-	1	-
Wine/Gourmet	-	-	1	1
Liquor Store	1	-	2	-
Other Specialty Food	1	4	-	2
<u>Furnishings & Appliances</u>				
Appliance	-	1	-	-
Home Décor	3	-	1	4

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach
<u>General Merchandise</u>				
Discount/Dollar Store	1	-	-	-
Drugstore	1	-	-	-
<u>Hardware/Building Materials</u>				
Lock & Key Store	2	1	1	-
<u>Service/Office</u>				
Bank	4	1	4	3
Health/Fitness (gyms, yoga)	11	2	6	-
Medical Office	27	3	5	5
Other Office	47	9	17	14
Salon/Spa/Barber/Nails	20	5	15	9
Other Storefront Service	11	1	9	4
<u>Specialty</u>				
Antiques	1	1	1	-
Art	3	1	-	4
Books	-	2	-	1
Florist	1	2	1	2
Jewelry	2	-	2	3
Other Specialty Retail	4	3	13	8
<u>Automobile Related</u>				
Gas Station	1	-	-	-
Automobile Service	1	-	-	-
<u>Other</u>				
Civic Buildings	9	5	4	4
Hotel	-	-	-	1
Church	2	-	-	-
GRAND TOTAL, STOREFRONT TENANTS	208	82	142	149

Category	El Segundo	Culver City	Hermosa Beach	Manhattan Beach
<i>Civic Uses in Downtown</i>				
City Hall	YES	YES	NO	YES
Library	NO	NO	YES	YES
Post Office	NO	YES	YES	NO
Fire Station	YES	YES	YES	NO
Police/Sheriff Station	YES	NO	NO	NO
Community/Senior Center	YES	NO	YES	NO

Source: TNDG

Appendix A
Retail Demand Calculations
(BASELINE SCENARIO)

Table A-1
Population Estimates and Projections
El Segundo Retail Trade Area

Area	2019	2020	2021	2025	2026	2030	2035	2040
Primary Market Area	17,209	17,272	17,297	17,399	17,425	17,553	17,682	17,812
Secondary Market Area	411,048	412,311	413,577	417,205	418,117	421,785	426,415	431,096
Total	428,257	429,583	430,874	434,604	435,542	439,338	444,097	448,908

Source: ESRI; Census 2020; SCAG; TNDG.

Table A-2
Per Capita Income Projections
El Segundo Retail Trade Area
In constant dollars

	2021							
Money income								
Primary Market Area			\$65,242					
Secondary Market Area			\$50,333					
Annual Increase Factor			5.00%	2019-2021 only				
Area	2019	2020	2021	2025	2026	2030	2035	2040
Primary Market Area	\$59,176	\$62,135	\$65,242	\$65,242	\$65,242	\$65,242	\$65,242	\$65,242
Secondary Market Area	\$45,654	\$47,936	\$50,333	\$50,333	\$50,333	\$50,333	\$50,333	\$50,333

Source: ESRI; TNDG.

Table A-3
Total Income and Potential Retail Sales Projections
El Segundo Retail Trade Area
In thousands of constant dollars

Area	2019	2020	2021	2025	2026	2030	2035	2040
<i>Percent of Income Spent on Retail:</i>								
Primary Market Area	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%
Secondary Market Area	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%
<i>Total Income:</i>								
Primary Market Area	\$1,018,378	\$1,073,200	\$1,128,513	\$1,135,152	\$1,136,818	\$1,145,184	\$1,153,611	\$1,162,100
Secondary Market Area	\$18,765,859	\$19,764,668	\$20,816,638	\$20,999,248	\$21,045,150	\$21,229,765	\$21,462,813	\$21,698,419
Total	\$19,784,237	\$20,837,867	\$21,945,151	\$22,134,400	\$22,181,968	\$22,374,949	\$22,616,424	\$22,860,519
<i>Potential Retail Sales:</i>								
Primary Market Area	\$349,806	\$368,637	\$387,637	\$389,917	\$390,489	\$393,363	\$396,257	\$399,173
Secondary Market Area	\$6,995,286	\$7,367,608	\$7,759,748	\$7,827,819	\$7,844,929	\$7,913,748	\$8,000,620	\$8,088,446
Total	\$7,345,091	\$7,736,245	\$8,147,384	\$8,217,736	\$8,235,419	\$8,307,110	\$8,396,877	\$8,487,619

Source: TNDG.

Table A-4
Distribution of Retail Sales by Retail Category
El Segundo Retail Trade Area

Retail Category	%Distribution 2019	%Distribution 2020	%Distribution 2021	%Distribution 2025	%Distribution 2026	%Distribution 2030	%Distribution 2035	%Distribution 2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
General Merchandise	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Home Furnishings and Appliances	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Specialty/Other	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Subtotal	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%
<i>Convenience Goods:</i>								
Food and Beverage	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
Food Service and Drinking	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
Subtotal	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Motor Vehicle and Parts Dealers	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Gasoline Stations	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Subtotal	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: TNDG, based on historic trends (2019 taxable sales) reported by the California Department of Tax and Fee Administration for Los Angeles County and California.

Table A-5
Projected Demand for Retail Sales by Major Retail Category
El Segundo Retail Trade Area - Primary Market Area
In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$27,984	\$29,491	\$31,011	\$31,193	\$31,239	\$31,469	\$31,701	\$31,934
General Merchandise	41,977	44,236	46,516	46,790	46,859	47,204	47,551	47,901
Home Furnishings and Appliances	17,490	18,432	19,382	19,496	19,524	19,668	19,813	19,959
Specialty/Other	48,973	51,609	54,269	54,588	54,668	55,071	55,476	55,884
Subtotal	\$136,424	\$143,768	\$151,178	\$152,068	\$152,291	\$153,411	\$154,540	\$155,678
<i>Convenience Goods:</i>								
Food and Beverage	\$55,969	\$58,982	\$62,022	\$62,387	\$62,478	\$62,938	\$63,401	\$63,868
Food Service and Drinking	59,467	62,668	65,898	66,286	66,383	66,872	67,364	67,859
Subtotal	\$115,436	\$121,650	\$127,920	\$128,673	\$128,861	\$129,810	\$130,765	\$131,727
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	31,483	33,177	34,887	35,093	35,144	35,403	35,663	35,926
Subtotal	\$97,946	\$103,218	\$108,538	\$109,177	\$109,337	\$110,142	\$110,952	\$111,769
Total	\$349,806	\$368,637	\$387,637	\$389,917	\$390,489	\$393,363	\$396,257	\$399,173

Source: TNDG.

Table A-6
Projected Demand for Retail Sales by Major Retail Category
El Segundo Retail Trade Area - Secondary Market Area
In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$559,623	\$589,409	\$620,780	\$626,225	\$627,594	\$633,100	\$640,050	\$647,076
General Merchandise	839,434	884,113	931,170	939,338	941,392	949,650	960,074	970,614
Home Furnishings and Appliances	349,764	368,380	387,987	391,391	392,246	395,687	400,031	404,422
Specialty/Other	979,340	1,031,465	1,086,365	1,095,895	1,098,290	1,107,925	1,120,087	1,132,382
Subtotal	\$2,728,161	\$2,873,367	\$3,026,302	\$3,052,849	\$3,059,522	\$3,086,362	\$3,120,242	\$3,154,494
<i>Convenience Goods:</i>								
Food and Beverage	\$1,119,246	\$1,178,817	\$1,241,560	\$1,252,451	\$1,255,189	\$1,266,200	\$1,280,099	\$1,294,151
Food Service and Drinking	1,189,199	1,252,493	1,319,157	1,330,729	1,333,638	1,345,337	1,360,105	1,375,036
Subtotal	\$2,308,444	\$2,431,311	\$2,560,717	\$2,583,180	\$2,588,827	\$2,611,537	\$2,640,205	\$2,669,187
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$419,717	\$442,056	\$465,585	\$469,669	\$470,696	\$474,825	\$480,037	\$485,307
Motor Vehicle and Parts Dealers	909,387	957,789	1,008,767	1,017,616	1,019,841	1,028,787	1,040,081	1,051,498
Gasoline Stations	629,576	663,085	698,377	704,504	706,044	712,237	720,056	727,960
Subtotal	\$1,958,680	\$2,062,930	\$2,172,729	\$2,191,789	\$2,196,580	\$2,215,849	\$2,240,174	\$2,264,765
Total	\$6,995,286	\$7,367,608	\$7,759,748	\$7,827,819	\$7,844,929	\$7,913,748	\$8,000,620	\$8,088,446

Source: TNDG.

Table A-7

Potential Capture of Market Area Demand for Retail Sales Expressed in Percentages

El Segundo Retail Trade Area - Primary Market Area

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
General Merchandise	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Home Furnishings and Appliances	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
Specialty/Other	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
<i>Convenience Goods:</i>								
Food and Beverage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Food Service and Drinking	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%	70.0%
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Motor Vehicle and Parts Dealers	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gasoline Stations	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: TNDG.

Table A-8
Potential Capture of Market Area Demand for Retail Sales Expressed in Percentages
El Segundo Retail Trade Area - Secondary Market Area

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%	1.5%
General Merchandise	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Home Furnishings and Appliances	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%	6.5%
Specialty/Other	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%	2.5%
<i>Convenience Goods:</i>								
Food and Beverage	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Food Service and Drinking	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%	3.5%
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Motor Vehicle and Parts Dealers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gasoline Stations	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: TNDG.

Table A-9

Potential Capture of Market Area Demand for Retail Sales

El Segundo Retail Trade Area - Primary Market Area

In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$19,589	\$20,644	\$21,708	\$21,835	\$21,867	\$22,028	\$22,190	\$22,354
General Merchandise	29,384	30,965	32,561	32,753	32,801	33,042	33,286	33,531
Home Furnishings and Appliances	12,243	12,902	13,567	13,647	13,667	13,768	13,869	13,971
Specialty/Other	34,281	36,126	37,988	38,212	38,268	38,550	38,833	39,119
Subtotal	\$95,497	\$100,638	\$105,825	\$106,447	\$106,604	\$107,388	\$108,178	\$108,974
<i>Convenience Goods:</i>								
Food and Beverage	\$55,969	\$58,982	\$62,022	\$62,387	\$62,478	\$62,938	\$63,401	\$63,868
Food Service and Drinking	41,627	43,868	46,129	46,400	46,468	46,810	47,155	47,502
Subtotal	\$97,596	\$102,850	\$108,151	\$108,787	\$108,946	\$109,748	\$110,556	\$111,369
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	31,483	33,177	34,887	35,093	35,144	35,403	35,663	35,926
Subtotal	\$97,946	\$103,218	\$108,538	\$109,177	\$109,337	\$110,142	\$110,952	\$111,769
Total	\$291,038	\$306,706	\$322,514	\$324,411	\$324,887	\$327,278	\$329,686	\$332,112

Source: TNDG.

Table A-10
Potential Capture of Market Area Demand for Retail Sales
El Segundo Retail Trade Area - Secondary Market Area
In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$8,394	\$8,841	\$9,312	\$9,393	\$9,414	\$9,496	\$9,601	\$9,706
General Merchandise	0	0	0	0	0	0	0	0
Home Furnishings and Appliances	22,735	23,945	25,219	25,440	25,496	25,720	26,002	26,287
Specialty/Other	24,483	25,787	27,159	27,397	27,457	27,698	28,002	28,310
Subtotal	\$55,613	\$58,572	\$61,690	\$62,231	\$62,367	\$62,914	\$63,605	\$64,303
<i>Convenience Goods:</i>								
Food and Beverage	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Food Service and Drinking	41,622	43,837	46,170	46,576	46,677	47,087	47,604	48,126
Subtotal	\$41,622	\$43,837	\$46,170	\$46,576	\$46,677	\$47,087	\$47,604	\$48,126
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Motor Vehicle and Parts Dealers	0	0	0	0	0	0	0	0
Gasoline Stations	0	0	0	0	0	0	0	0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$97,234	\$102,410	\$107,860	\$108,807	\$109,045	\$110,001	\$111,209	\$112,429

Source: TNDG.

Table A-11

**Potential Capture of Market Area Demand for Retail Sales
El Segundo Retail Trade Area - All Market Areas Combined
In thousands of constant dollars**

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$27,983	\$29,485	\$31,019	\$31,229	\$31,281	\$31,525	\$31,791	\$32,060
General Merchandise	29,384	30,965	32,561	32,753	32,801	33,042	33,286	33,531
Home Furnishings and Appliances	34,978	36,847	38,786	39,088	39,163	39,487	39,871	40,259
Specialty/Other	58,764	61,913	65,147	65,609	65,725	66,248	66,835	67,429
Subtotal	\$151,109	\$159,210	\$167,515	\$168,678	\$168,971	\$170,302	\$171,783	\$173,277
<i>Convenience Goods:</i>								
Food and Beverage	\$55,969	\$58,982	\$62,022	\$62,387	\$62,478	\$62,938	\$63,401	\$63,868
Food Service and Drinking	83,249	87,705	92,299	92,976	93,146	93,897	94,758	95,628
Subtotal	\$139,218	\$146,687	\$154,321	\$155,362	\$155,624	\$156,835	\$158,159	\$159,496
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	31,483	33,177	34,887	35,093	35,144	35,403	35,663	35,926
Subtotal	\$97,946	\$103,218	\$108,538	\$109,177	\$109,337	\$110,142	\$110,952	\$111,769
Total	\$388,273	\$409,116	\$430,374	\$433,218	\$433,931	\$437,279	\$440,895	\$444,542

Source: TNDG.

Table A-12
Factor to Account for Daytime Spending of El Segundo Workforce
El Segundo Retail Trade Area

Retail Category	Factor
<i>Shopper Goods:</i>	
Clothing and Clothing Accessories	1.70
General Merchandise	1.00
Home Furnishings and Appliances	3.80
Specialty/Other	3.40
<i>Convenience Goods:</i>	
Food and Beverage	2.10
Food Services and Drinking	2.20
<i>Heavy Commercial Goods:</i>	
Bldg. Matrl. and Garden Equip. and Supplies	1.00
Motor Vehicle and Parts Dealers	1.00
Gasoline Stations	1.50

Source: TNDG.

Table A-13

Potential Capture of Market Area Demand for Retail Sales

El Segundo Retail Trade Area - Resident and Daytime Worker Demand Combined

In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$47,572	\$50,124	\$52,733	\$53,089	\$53,178	\$53,592	\$54,045	\$54,502
General Merchandise	29,384	30,965	32,561	32,753	32,801	33,042	33,286	33,531
Home Furnishings and Appliances	132,916	140,019	147,389	148,533	148,820	150,052	151,510	152,982
Specialty/Other	199,799	210,504	221,501	223,071	223,466	225,242	227,240	229,257
Subtotal	\$409,671	\$431,613	\$454,184	\$457,446	\$458,265	\$461,929	\$466,081	\$470,272
<i>Convenience Goods:</i>								
Food and Beverage	\$117,535	\$123,862	\$130,246	\$131,012	\$131,204	\$132,170	\$133,142	\$134,122
Food Service and Drinking	183,147	192,951	203,058	204,546	204,920	206,573	208,468	210,381
Subtotal	\$300,682	\$316,813	\$333,304	\$335,558	\$336,125	\$338,743	\$341,611	\$344,504
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	47,224	49,766	52,331	52,639	52,716	53,104	53,495	53,888
Subtotal	\$113,687	\$119,807	\$125,982	\$126,723	\$126,909	\$127,843	\$128,784	\$129,731
Total	\$824,040	\$868,233	\$913,471	\$919,727	\$921,298	\$928,515	\$936,475	\$944,507

Source: TNDG.

Table A-14
Comparison of Potential Retail Demand with Estimated Sales
City of El Segundo
in thousands of constant dollars
(Using 2019 figures to avoid Covid distortions)

Retail Category	2019 Demand	2019 Estimated Sales	Expected Less Actual	Percent Actual/ Expected
<i>Shopper Goods:</i>				
Clothing and Clothing Accessories	\$47,572	\$46,850	\$722	98.5%
General Merchandise	\$29,384	3,110	26,273	10.6%
Home Furnishings and Appliances	\$132,916	131,985	931	99.3%
Specialty/Other	\$199,799	191,483	8,317	95.8%
Subtotal	\$409,671	\$373,429	\$36,242	91.2%
<i>Convenience Goods:</i>				
Food and Beverage	\$117,535	\$118,044	(\$509)	100.4%
Food Service and Drinking	\$183,147	177,800	5,348	97.1%
Subtotal	\$300,682	\$295,843	\$4,839	98.4%
<i>Heavy Commercial Goods:</i>				
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$11,016	\$9,972	52.5%
Motor Vehicle and Parts Dealers	\$45,475	2,386	43,089	5.2%
Gasoline Stations	\$47,224	46,438	786	98.3%
Subtotal	\$113,687	\$59,840	\$53,847	52.6%
Total	\$824,040	\$729,112	\$94,928	88.5%

Source: CDTFA; TNDG.

Table A-15
Net New Supportable Retail Sales (based on 2019 existing sales)
City of El Segundo
in thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$722	\$3,274	\$5,883	\$6,238	\$6,328	\$6,742	\$7,195	\$7,651
General Merchandise	26,273	27,855	29,451	29,643	29,691	29,932	30,175	30,420
Home Furnishings and Appliances	931	8,033	15,403	16,547	16,835	18,067	19,525	20,997
Specialty/Other	8,317	19,022	30,019	31,589	31,983	33,759	35,758	37,774
Subtotal	\$36,242	\$58,184	\$80,756	\$84,017	\$84,836	\$88,500	\$92,652	\$96,843
<i>Convenience Goods:</i>								
Food and Beverage	(\$509)	\$5,818	\$12,202	\$12,968	\$13,161	\$14,126	\$15,099	\$16,079
Food Service and Drinking	5,348	15,151	25,259	26,747	27,121	28,774	30,669	32,582
Subtotal	\$4,839	\$20,970	\$37,461	\$39,715	\$40,281	\$42,900	\$45,767	\$48,660
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$9,972	\$11,102	\$12,242	\$12,379	\$12,413	\$12,586	\$12,759	\$12,934
Motor Vehicle and Parts Dealers	43,089	45,537	48,007	48,303	48,378	48,751	49,128	49,507
Gasoline Stations	786	3,328	5,893	6,201	6,278	6,666	7,057	7,451
Subtotal	\$53,847	\$59,967	\$66,142	\$66,883	\$67,069	\$68,003	\$68,944	\$69,891
Total	\$94,928	\$139,121	\$184,359	\$190,615	\$192,187	\$199,403	\$207,363	\$215,395

Source: TNDG.

Table A-16
Sales Per Square Foot Standards
El Segundo Retail Trade Area
Expressed in Sales/Square Feet

Retail Category	Sales/Square Feet
GAFO*	\$350
Food and Beverage	\$600
Food Service and Drinking	\$600
Bldg. Matrl. and Garden Equip. and Supplies	\$325
Automotive Parts	\$200

*GAFO: General Merchandise, Apparel, Furniture/Appliances, Qther/Specialty

Source: Retail Maxim; Urban Land Institute (ULI); TNDG.

Table A-17
Net Demand for Retail Space
City of El Segundo
Expressed in Square Feet

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
GAFO	103,549	166,240	230,731	240,049	242,389	252,857	264,721	276,695
<i>Convenience Goods:</i>								
Food and Beverage	(848)	9,697	20,337	21,614	21,934	23,544	25,165	26,798
Food Service and Drinking	8,913	25,252	42,098	44,578	45,201	47,956	51,114	54,303
Subtotal	8,065	34,949	62,435	66,192	67,135	71,500	76,279	81,100
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	30,684	34,160	37,668	38,089	38,194	38,725	39,259	39,798
Automotive Parts*	19,390	20,492	21,603	21,737	21,770	21,938	22,107	22,278
Gasoline Stations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	50,074	54,652	59,271	59,825	59,964	60,663	61,367	62,076
Services Space @ 10% of retail subtotal	16,169	25,584	35,244	36,607	36,949	38,502	40,237	41,987
Grand Total	177,856	281,425	387,680	402,673	406,438	423,522	442,603	461,858

*Assumes that automotive parts stores account for 9% of sales in overall Automotive group category (based on statewide average).

Source: TNDG.

Appendix B
Retail Demand Calculations
(AGGRESSIVE SCENARIO)

Table B-1
Population Estimates and Projections
El Segundo Retail Trade Area

Area	2019	2020	2021	2025	2026	2030	2035	2040
Primary Market Area	17,209	17,272	17,297	17,399	17,425	17,553	17,682	17,812
Secondary Market Area	411,048	412,311	413,577	417,205	418,117	421,785	426,415	431,096
Total	428,257	429,583	430,874	434,604	435,542	439,338	444,097	448,908

Source: ESRI; Census 2020; SCAG; TNDG.

Table B-2
Per Capita Income Projections
El Segundo Retail Trade Area
In constant dollars

	2021							
Money income								
Primary Market Area	\$65,242							
Secondary Market Area	\$50,333							
Annual Increase Factor	5.00% 2019-2021 only							
Area	2019	2020	2021	2025	2026	2030	2035	2040
Primary Market Area	\$59,176	\$62,135	\$65,242	\$65,242	\$65,242	\$65,242	\$65,242	\$65,242
Secondary Market Area	\$45,654	\$47,936	\$50,333	\$50,333	\$50,333	\$50,333	\$50,333	\$50,333

Source: ESRI; TNDG.

Table B-3
Total Income and Potential Retail Sales Projections
El Segundo Retail Trade Area
In thousands of constant dollars

Area	2019	2020	2021	2025	2026	2030	2035	2040
<i>Percent of Income Spent on Retail:</i>								
Primary Market Area	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%	34.3%
Secondary Market Area	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%	37.3%
<i>Total Income:</i>								
Primary Market Area	\$1,018,378	\$1,073,200	\$1,128,513	\$1,135,152	\$1,136,818	\$1,145,184	\$1,153,611	\$1,162,100
Secondary Market Area	\$18,765,859	\$19,764,668	\$20,816,638	\$20,999,248	\$21,045,150	\$21,229,765	\$21,462,813	\$21,698,419
Total	\$19,784,237	\$20,837,867	\$21,945,151	\$22,134,400	\$22,181,968	\$22,374,949	\$22,616,424	\$22,860,519
<i>Potential Retail Sales:</i>								
Primary Market Area	\$349,806	\$368,637	\$387,637	\$389,917	\$390,489	\$393,363	\$396,257	\$399,173
Secondary Market Area	\$6,995,286	\$7,367,608	\$7,759,748	\$7,827,819	\$7,844,929	\$7,913,748	\$8,000,620	\$8,088,446
Total	\$7,345,091	\$7,736,245	\$8,147,384	\$8,217,736	\$8,235,419	\$8,307,110	\$8,396,877	\$8,487,619

Source: TNDG.

Table B-4
Distribution of Retail Sales by Retail Category
El Segundo Retail Trade Area

Retail Category	%Distribution 2019	%Distribution 2020	%Distribution 2021	%Distribution 2025	%Distribution 2026	%Distribution 2030	%Distribution 2035	%Distribution 2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
General Merchandise	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%	12.0%
Home Furnishings and Appliances	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
Specialty/Other	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%	14.0%
Subtotal	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%	39.0%
<i>Convenience Goods:</i>								
Food and Beverage	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%	16.0%
Food Service and Drinking	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%	17.0%
Subtotal	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%	33.0%
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
Motor Vehicle and Parts Dealers	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%
Gasoline Stations	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%	9.0%
Subtotal	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%	28.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: TNDG, based on historic trends (2019 taxable sales) reported by the California Department of Tax and Fee Administration for Los Angeles County and California.

Table B-5
Projected Demand for Retail Sales by Major Retail Category
El Segundo Retail Trade Area - Primary Market Area
In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$27,984	\$29,491	\$31,011	\$31,193	\$31,239	\$31,469	\$31,701	\$31,934
General Merchandise	41,977	44,236	46,516	46,790	46,859	47,204	47,551	47,901
Home Furnishings and Appliances	17,490	18,432	19,382	19,496	19,524	19,668	19,813	19,959
Specialty/Other	48,973	51,609	54,269	54,588	54,668	55,071	55,476	55,884
Subtotal	\$136,424	\$143,768	\$151,178	\$152,068	\$152,291	\$153,411	\$154,540	\$155,678
<i>Convenience Goods:</i>								
Food and Beverage	\$55,969	\$58,982	\$62,022	\$62,387	\$62,478	\$62,938	\$63,401	\$63,868
Food Service and Drinking	59,467	62,668	65,898	66,286	66,383	66,872	67,364	67,859
Subtotal	\$115,436	\$121,650	\$127,920	\$128,673	\$128,861	\$129,810	\$130,765	\$131,727
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	31,483	33,177	34,887	35,093	35,144	35,403	35,663	35,926
Subtotal	\$97,946	\$103,218	\$108,538	\$109,177	\$109,337	\$110,142	\$110,952	\$111,769
Total	\$349,806	\$368,637	\$387,637	\$389,917	\$390,489	\$393,363	\$396,257	\$399,173

Source: TNDG.

Table B-6
Projected Demand for Retail Sales by Major Retail Category
El Segundo Retail Trade Area - Secondary Market Area
In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$559,623	\$589,409	\$620,780	\$626,225	\$627,594	\$633,100	\$640,050	\$647,076
General Merchandise	839,434	884,113	931,170	939,338	941,392	949,650	960,074	970,614
Home Furnishings and Appliances	349,764	368,380	387,987	391,391	392,246	395,687	400,031	404,422
Specialty/Other	979,340	1,031,465	1,086,365	1,095,895	1,098,290	1,107,925	1,120,087	1,132,382
Subtotal	\$2,728,161	\$2,873,367	\$3,026,302	\$3,052,849	\$3,059,522	\$3,086,362	\$3,120,242	\$3,154,494
<i>Convenience Goods:</i>								
Food and Beverage	\$1,119,246	\$1,178,817	\$1,241,560	\$1,252,451	\$1,255,189	\$1,266,200	\$1,280,099	\$1,294,151
Food Service and Drinking	1,189,199	1,252,493	1,319,157	1,330,729	1,333,638	1,345,337	1,360,105	1,375,036
Subtotal	\$2,308,444	\$2,431,311	\$2,560,717	\$2,583,180	\$2,588,827	\$2,611,537	\$2,640,205	\$2,669,187
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$419,717	\$442,056	\$465,585	\$469,669	\$470,696	\$474,825	\$480,037	\$485,307
Motor Vehicle and Parts Dealers	909,387	957,789	1,008,767	1,017,616	1,019,841	1,028,787	1,040,081	1,051,498
Gasoline Stations	629,576	663,085	698,377	704,504	706,044	712,237	720,056	727,960
Subtotal	\$1,958,680	\$2,062,930	\$2,172,729	\$2,191,789	\$2,196,580	\$2,215,849	\$2,240,174	\$2,264,765
Total	\$6,995,286	\$7,367,608	\$7,759,748	\$7,827,819	\$7,844,929	\$7,913,748	\$8,000,620	\$8,088,446

Source: TNDG.

Table B-7
Potential Capture of Market Area Demand for Retail Sales Expressed in Percentages
El Segundo Retail Trade Area - Primary Market Area

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	70.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
General Merchandise	70.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Home Furnishings and Appliances	70.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
Specialty/Other	70.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
<i>Convenience Goods:</i>								
Food and Beverage	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Food Service and Drinking	70.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%	80.0%
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Motor Vehicle and Parts Dealers	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Gasoline Stations	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Source: TNDG.

Table B-8
Potential Capture of Market Area Demand for Retail Sales Expressed in Percentages
El Segundo Retail Trade Area - Secondary Market Area

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	1.5%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%	3.0%
General Merchandise	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Home Furnishings and Appliances	6.5%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%	8.0%
Specialty/Other	2.5%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%	4.0%
<i>Convenience Goods:</i>								
Food and Beverage	0.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%
Food Service and Drinking	3.5%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Motor Vehicle and Parts Dealers	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Gasoline Stations	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

Source: TNDG.

Table B-9

Potential Capture of Market Area Demand for Retail Sales

El Segundo Retail Trade Area - Primary Market Area

In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$19,589	\$23,593	\$24,809	\$24,955	\$24,991	\$25,175	\$25,360	\$25,547
General Merchandise	29,384	35,389	37,213	37,432	37,487	37,763	38,041	38,321
Home Furnishings and Appliances	12,243	14,745	15,505	15,597	15,620	15,735	15,850	15,967
Specialty/Other	34,281	41,287	43,415	43,671	43,735	44,057	44,381	44,707
Subtotal	\$95,497	\$115,015	\$120,943	\$121,654	\$121,833	\$122,729	\$123,632	\$124,542
<i>Convenience Goods:</i>								
Food and Beverage	\$55,969	\$58,982	\$62,022	\$62,387	\$62,478	\$62,938	\$63,401	\$63,868
Food Service and Drinking	41,627	50,135	52,719	53,029	53,107	53,497	53,891	54,288
Subtotal	\$97,596	\$109,116	\$114,740	\$115,415	\$115,585	\$116,435	\$117,292	\$118,155
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	31,483	33,177	34,887	35,093	35,144	35,403	35,663	35,926
Subtotal	\$97,946	\$103,218	\$108,538	\$109,177	\$109,337	\$110,142	\$110,952	\$111,769
Total	\$291,038	\$327,349	\$344,221	\$346,246	\$346,754	\$349,306	\$351,877	\$354,466

Source: TNDG.

Table B-10

Potential Capture of Market Area Demand for Retail Sales

El Segundo Retail Trade Area - Secondary Market Area

In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$8,394	\$17,682	\$18,623	\$18,787	\$18,828	\$18,993	\$19,201	\$19,412
General Merchandise	0	0	0	0	0	0	0	0
Home Furnishings and Appliances	22,735	29,470	31,039	31,311	31,380	31,655	32,002	32,354
Specialty/Other	24,483	41,259	43,455	43,836	43,932	44,317	44,803	45,295
Subtotal	\$55,613	\$88,411	\$93,117	\$93,934	\$94,139	\$94,965	\$96,007	\$97,061
<i>Convenience Goods:</i>								
Food and Beverage	\$0	\$11,788	\$12,416	\$12,525	\$12,552	\$12,662	\$12,801	\$12,942
Food Service and Drinking	41,622	62,625	65,958	66,536	66,682	67,267	68,005	68,752
Subtotal	\$41,622	\$74,413	\$78,373	\$79,061	\$79,234	\$79,929	\$80,806	\$81,693
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Motor Vehicle and Parts Dealers	0	0	0	0	0	0	0	0
Gasoline Stations	0	0	0	0	0	0	0	0
Subtotal	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total	\$97,234	\$162,824	\$171,490	\$172,995	\$173,373	\$174,894	\$176,814	\$178,755

Source: TNDG.

Table B-11

**Potential Capture of Market Area Demand for Retail Sales
 El Segundo Retail Trade Area - All Market Areas Combined
 In thousands of constant dollars**

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$27,983	\$41,275	\$43,432	\$43,741	\$43,819	\$44,168	\$44,562	\$44,959
General Merchandise	29,384	35,389	37,213	37,432	37,487	37,763	38,041	38,321
Home Furnishings and Appliances	34,978	44,216	46,544	46,908	46,999	47,389	47,853	48,321
Specialty/Other	58,764	82,546	86,870	87,506	87,666	88,374	89,184	90,003
Subtotal	\$151,109	\$203,426	\$214,060	\$215,588	\$215,972	\$217,694	\$219,640	\$221,603
<i>Convenience Goods:</i>								
Food and Beverage	\$55,969	\$70,770	\$74,437	\$74,911	\$75,030	\$75,600	\$76,202	\$76,809
Food Service and Drinking	83,249	112,759	118,676	119,565	119,788	120,764	121,896	123,039
Subtotal	\$139,218	\$183,529	\$193,114	\$194,476	\$194,819	\$196,364	\$198,098	\$199,849
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	31,483	33,177	34,887	35,093	35,144	35,403	35,663	35,926
Subtotal	\$97,946	\$103,218	\$108,538	\$109,177	\$109,337	\$110,142	\$110,952	\$111,769
Total	\$388,273	\$490,174	\$515,712	\$519,241	\$520,127	\$524,200	\$528,690	\$533,221

Source: TNDG.

Table B-12
Factor to Account for Daytime Spending of El Segundo Workforce
El Segundo Retail Trade Area

Retail Category	Factor
<i>Shopper Goods:</i>	
Clothing and Clothing Accessories	1.70
General Merchandise	1.00
Home Furnishings and Appliances	3.80
Specialty/Other	3.40
<i>Convenience Goods:</i>	
Food and Beverage	2.10
Food Services and Drinking	2.20
<i>Heavy Commercial Goods:</i>	
Bldg. Matrl. and Garden Equip. and Supplies	1.00
Motor Vehicle and Parts Dealers	1.00
Gasoline Stations	1.50

Source: TNDG.

Table B-13

Potential Capture of Market Area Demand for Retail Sales

El Segundo Retail Trade Area - Resident and Daytime Worker Demand Combined

In thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$47,572	\$70,168	\$73,835	\$74,360	\$74,493	\$75,086	\$75,755	\$76,431
General Merchandise	29,384	35,389	37,213	37,432	37,487	37,763	38,041	38,321
Home Furnishings and Appliances	132,916	168,020	176,869	178,250	178,597	180,080	181,841	183,619
Specialty/Other	199,799	280,656	295,358	297,522	298,066	300,470	303,227	306,009
Subtotal	\$409,671	\$554,233	\$583,274	\$587,565	\$588,642	\$593,399	\$598,863	\$604,380
<i>Convenience Goods:</i>								
Food and Beverage	\$117,535	\$148,617	\$156,319	\$157,314	\$157,563	\$158,760	\$160,025	\$161,299
Food Service and Drinking	183,147	248,070	261,088	263,043	263,535	265,681	268,172	270,687
Subtotal	\$300,682	\$396,687	\$417,407	\$420,357	\$421,098	\$424,441	\$428,196	\$431,986
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$22,118	\$23,258	\$23,395	\$23,429	\$23,602	\$23,775	\$23,950
Motor Vehicle and Parts Dealers	45,475	47,923	50,393	50,689	50,764	51,137	51,513	51,893
Gasoline Stations	47,224	49,766	52,331	52,639	52,716	53,104	53,495	53,888
Subtotal	\$113,687	\$119,807	\$125,982	\$126,723	\$126,909	\$127,843	\$128,784	\$129,731
Total	\$824,040	\$1,070,728	\$1,126,663	\$1,134,645	\$1,136,649	\$1,145,683	\$1,155,843	\$1,166,097

Source: TNDG.

Table B-14
Comparison of Potential Retail Demand with Estimated Sales
City of El Segundo
in thousands of constant dollars
(Using 2019 figures to avoid Covid distortions)

Retail Category	2019 Demand	2019 Estimated Sales	Expected Less Actual	Percent Actual/ Expected
<i>Shopper Goods:</i>				
Clothing and Clothing Accessories	\$47,572	\$46,850	\$722	98.5%
General Merchandise	\$29,384	3,110	26,273	10.6%
Home Furnishings and Appliances	\$132,916	131,985	931	99.3%
Specialty/Other	\$199,799	191,483	8,317	95.8%
Subtotal	\$409,671	\$373,429	\$36,242	91.2%
<i>Convenience Goods:</i>				
Food and Beverage	\$117,535	\$118,044	(\$509)	100.4%
Food Service and Drinking	\$183,147	177,800	5,348	97.1%
Subtotal	\$300,682	\$295,843	\$4,839	98.4%
<i>Heavy Commercial Goods:</i>				
Bldg. Matrl. and Garden Equip. and Supplies	\$20,988	\$11,016	\$9,972	52.5%
Motor Vehicle and Parts Dealers	\$45,475	2,386	43,089	5.2%
Gasoline Stations	\$47,224	46,438	786	98.3%
Subtotal	\$113,687	\$59,840	\$53,847	52.6%
Total	\$824,040	\$729,112	\$94,928	88.5%

Source: CDTFA; TNDG.

Table B-15
Net *New* Supportable Retail Sales (based on 2019 existing sales)
City of El Segundo
in thousands of constant dollars

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
Clothing and Clothing Accessories	\$722	\$23,317	\$26,984	\$27,510	\$27,642	\$28,236	\$28,905	\$29,581
General Merchandise	26,273	32,279	34,103	34,322	34,377	34,652	34,930	35,210
Home Furnishings and Appliances	931	36,035	44,884	46,265	46,612	48,095	49,855	51,634
Specialty/Other	8,317	89,174	103,875	106,039	106,583	108,988	111,744	114,527
Subtotal	\$36,242	\$180,805	\$209,846	\$214,136	\$215,214	\$219,971	\$225,435	\$230,951
<i>Convenience Goods:</i>								
Food and Beverage	(\$509)	\$30,573	\$38,275	\$39,270	\$39,520	\$40,716	\$41,981	\$43,256
Food Service and Drinking	5,348	70,271	83,288	85,244	85,735	87,882	90,372	92,887
Subtotal	\$4,839	\$100,844	\$121,563	\$124,514	\$125,254	\$128,598	\$132,353	\$136,143
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	\$9,972	\$11,102	\$12,242	\$12,379	\$12,413	\$12,586	\$12,759	\$12,934
Motor Vehicle and Parts Dealers	43,089	45,537	48,007	48,303	48,378	48,751	49,128	49,507
Gasoline Stations	786	3,328	5,893	6,201	6,278	6,666	7,057	7,451
Subtotal	\$53,847	\$59,967	\$66,142	\$66,883	\$67,069	\$68,003	\$68,944	\$69,891
Total	\$94,928	\$341,616	\$397,551	\$405,533	\$407,537	\$416,571	\$426,731	\$436,985

Source: TNDG.

Table B-16
Sales Per Square Foot Standards
El Segundo Retail Trade Area
Expressed in Sales/Square Feet

Retail Category	Sales/Square Feet
GAFO*	\$350
Food and Beverage	\$600
Food Service and Drinking	\$600
Bldg. Matrl. and Garden Equip. and Supplies	\$325
Automotive Parts	\$200

*GAFO: General Merchandise, Apparel, Furniture/Appliances, Qther/Specialty

Source: Retail Maxim; Urban Land Institute (ULI); TNDG.

Table B-17
Net Demand for Retail Space
City of El Segundo
Expressed in Square Feet

Retail Category	2019	2020	2021	2025	2026	2030	2035	2040
<i>Shopper Goods:</i>								
GAFO	103,549	516,585	599,559	611,818	614,897	628,487	644,099	659,860
<i>Convenience Goods:</i>								
Food and Beverage	(848)	50,956	63,792	65,450	65,866	67,861	69,968	72,093
Food Service and Drinking	8,913	117,118	138,814	142,073	142,891	146,469	150,620	154,812
Subtotal	8,065	168,074	202,606	207,523	208,757	214,330	220,588	226,904
<i>Heavy Commercial Goods:</i>								
Bldg. Matrl. and Garden Equip. and Supplies	30,684	34,160	37,668	38,089	38,194	38,725	39,259	39,798
Automotive Parts*	19,390	20,492	21,603	21,737	21,770	21,938	22,107	22,278
Gasoline Stations	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Subtotal	50,074	54,652	59,271	59,825	59,964	60,663	61,367	62,076
Services Space @ 10% of retail subtotal	16,169	73,931	86,144	87,917	88,362	90,348	92,605	94,884
Grand Total	177,856	813,241	947,579	967,082	971,981	993,828	1,018,659	1,043,724

*Assumes that automotive parts stores account for 9% of sales in overall Automotive group category (based on statewide average).

Source: TNDG.

Appendix C

Office Demand Calculations

Table C-1
Employment Forecasts by Industry Group
Los Angeles County
2020-2040

Industry	2020	2025	2030	2035	2040
Natural Resources, Mining, & Construction	145,610	158,000	165,320	171,170	176,570
Manufacturing	338,300	312,690	299,400	289,620	281,150
Wholesale Trade	228,680	233,100	235,590	237,510	239,250
Retail Trade	431,950	445,370	452,980	458,900	464,250
Transportation, Warehousing & Utilities	191,400	203,410	210,390	215,900	220,960
Information	234,740	241,850	245,880	249,020	251,850
Financial Activities	222,340	225,550	227,350	228,740	229,990
Professional & Business Services	627,730	659,790	678,260	692,770	706,000
Educational & Health Services	836,320	930,930	988,010	1,034,190	1,077,320
Leisure & Hospitality	548,440	600,590	631,640	656,550	679,660
Other Services	158,680	165,670	169,670	172,800	175,650
Government	<u>587,590</u>	<u>601,480</u>	<u>609,320</u>	<u>615,390</u>	<u>620,870</u>
Total Nonfarm	4,551,780	4,778,430	4,913,810	5,022,560	5,123,520

Source: TNDG, based on Industry Employment Estimates and Projections, California Employment Development Department (EDD); Southern California Association of Governments (SCAG), 2020 RTP/SCS Growth Forecast.

Table C-2
Employment Forecasts by Industry Group
South Bay Cities
2020-2040

Industry	2020	2025	2030	2035	2040
Natural Resources, Mining, & Construction	3,220	3,270	3,330	3,380	3,460
Manufacturing	5,310	5,230	5,150	5,070	4,970
Wholesale Trade	5,890	5,910	5,930	5,960	5,990
Retail Trade	23,120	23,270	23,410	23,550	23,740
Transportation, Warehousing & Utilities	2,060	2,090	2,110	2,140	2,170
Information	900	910	910	920	920
Financial Activities	7,630	7,650	7,670	7,690	7,720
Professional & Business Services	12,220	12,340	12,460	12,580	12,750
Educational & Health Services	40,190	41,060	41,950	42,850	44,080
Leisure & Hospitality	22,970	23,400	23,820	24,260	24,850
Other Services	2,490	2,510	2,540	2,560	2,590
Government	<u>2,590</u>	<u>2,600</u>	<u>2,610</u>	<u>2,620</u>	<u>2,640</u>
Total Nonfarm	128,590	130,240	131,890	133,580	135,880

Source: TNDG, based on Industry Employment Estimates and Projections, California Employment Development Department (EDD); Southern California Association of Governments (SCAG), 2020 RTP/SCS Growth Forecast.

Table C-3
Allocation of Employment by Land Use Category
South Bay Cities

Industry	Office Space	Industrial Space	Other Space	Total
Natural Resources, Mining, & Construction	15%	20%	65%	100%
Manufacturing	15%	85%	0%	100%
Wholesale Trade	15%	85%	0%	100%
Retail Trade	5%	15%	80%	100%
Transportation, Warehousing & Utilities	5%	80%	15%	100%
Information	100%	0%	0%	100%
Financial Activities	100%	0%	0%	100%
Professional & Business Services	100%	0%	0%	100%
Educational & Health Services	60%	0%	40%	100%
Leisure & Hospitality	25%	0%	75%	100%
Other Services	25%	40%	35%	100%
Government	10%	0%	90%	100%

Source: TNDG.

Table C-4
Projected Employment by Land Use Category
2020-2040
South Bay Cities

Land Use Category	<i>Employment by Year:</i>				
	2020	2025	2030	2035	2040
Office	54,910	55,703	56,499	57,313	58,421
Industrial	16,276	16,290	16,300	16,320	16,341
Other	57,404	58,248	59,092	59,947	61,119
Total Nonfarm Employment	128,590	130,240	131,890	133,580	135,880

Source: TNDG, Tables B-2 and B-3

Table C-5
Projected Employment by Land Use Category
2020-2040
South Bay Cities

Land Use Category	<i>Change in Employment by Timer Period:</i>			
	2020-25	2025-30	2030-35	2035-40
Office	793	796	815	1,108
Industrial	14	10	21	21
Other	844	845	855	1,172
Total Nonfarm Employment	1,650	1,650	1,690	2,300

Source: TNDG, Tables B-4

Table C-6
Projected Demand for New Office Space
2020-2040
South Bay Cities

Square Feet per Employee - Office Space 200

		2020-30	2030-40	Total	Average Annual, 2020- 2040
Office Demand					
Demand for New Space		317,700	384,400	702,100	35,105
Construction Demand @	110%	349,470	422,840	772,310	38,616
<i>Medical Office Demand (over and above General Office demand):</i>				<i>162,185</i>	

Source: TNDG, Table C-5

Appendix D

Storefront Tenant Lists for Downtowns

(El Segundo, Culver City, Hermosa Beach, Manhattan Beach)

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
Main (South Side)	500	Public parking lot	Civic - Parking Lot	Civic Buildings
	531	The Mail Box	Other Storefront Service	Service/Office
	529	Study Hut Tutoring	Other Storefront Service	Service/Office
	519	Hairlines	Salon/Spa/Barber/Nails	Service/Office
	521	Toroy Diaz Wellness	Medical Office	Service/Office
	525	El Segundo Medical Center	Medical Office	Service/Office
	533	El Segundo Eyecare	Medical Office	Service/Office
	507	Big Mike Subs	Other Fast Food	Eating & Drinking
	505	Easton Gym Company	Health/Fitness (gym, yoga, etc.)	Service/Office
	503	Kreaton Organic	Ice Cream/Yogurt/Juice	Eating & Drinking
	455	Bill Ruane Remax Estate Properties	Other Office	Service/Office
	455	Kaleka Dental	Medical Office	Service/Office
	455	Alternative Business Funding	Other Office	Service/Office
	455	Matt Crabbs Compass	Other Office	Service/Office
	439	Canton Low Chinese Resturant	Casual Dining	Eating & Drinking
	433	Wreck It Gym	Health/Fitness (gym, yoga, etc.)	Service/Office
	431	Beach City Brokers (real estate)	Other Office	Service/Office
	427	El Segundo Chamber of Commerce	City Hall	Civic Buildings
	425	Steve Guidone Dentistry	Medical Office	Service/Office
	425.5	Pilates on Main	Health/Fitness (gym, yoga, etc.)	Service/Office
	423	Pure Lux Medical	Medical Office	Service/Office
	421	Palm Reality Boutique	Other Office	Service/Office
	419	Bicycle Shop	Other Storefront Service	Service/Office
	417	Gelato-go	Ice Cream/Yogurt/Juice	Eating & Drinking
	415	Cigar & More	Other Speciality Food	Food
	413	Pho Dreams	Casual Dining	Eating & Drinking
	411	Hannes Resturant	Casual Dining	Eating & Drinking
	409	Heina Haru Sushi Bar	Casual Dining	Eating & Drinking
	407	Relaxation Nail Spa	Salon/Spa/Barber/Nails	Service/Office
	405	Create & Express	Other Speciality Retail	Speciality
	403	Kagura Tokyo Cuisine	Casual Dining	Eating & Drinking
401	Industrial Lock & Securiry	Lock & Key Store	Hardware	
361	Kirk Brown Reality	Other Office	Service/Office	
359	Lan's Hair and Nails	Salon/Spa/Barber/Nails	Service/Office	

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
	357	The Grand Sushi	Casual Dining	Eating & Drinking
	353	Happy Baby	Health/Fitness (gym, yoga, etc.)	Service/Office
	351	Blue Butterfly Coffee Co.	Coffee/Tea	Eating & Drinking
	347	Bank of America	Bank	Service/Office
	343	Chipton Ross	Other Office	Service/Office
	337	The Jewelry Source	Jewelry	Speciality
	333	Canoe Hospitality	Other Office	Service/Office
	333B	S and D Design	Other Office	Service/Office
	325	David & Derosa Physical Therapy	Medical Office	Service/Office
	327	Pacific Physical Therapy	Medical Office	Service/Office
	323	Rinaldi's Italian Deli	Other Fast Food	Eating & Drinking
	321	Two Gun's Kitchen	Casual Dining	Eating & Drinking
	319	Labib Funk & Association	Other Office	Service/Office
	313	Eagle Cleaners	Other Storefront Service	Service/Office
	311	Alec Ferradas Dental Offices, DDS	Medical Office	Service/Office
	309	World Karate	Health/Fitness (gym, yoga, etc.)	Service/Office
	305	El Segundo Tailors	Other Storefront Service	Service/Office
	301	Body Doc Healing Center	Medical Office	Service/Office
	275	Citizens Business Bank	Bank	Service/Office
	255	Back for Yoga	Health/Fitness (gym, yoga, etc.)	Service/Office
	253	Gambucci clinic	Medical Office	Service/Office
	251	Chicken Dijon Rotisseri	Upscale Fastfood	Eating & Drinking
	249	Music on Main	Other Office	Service/Office
	247	The Donut	Other Fast Food	Eating & Drinking
	245	Blue Diamond Jeweler	Jewelry	Speciality
	243	Jetta Authentic Thai Cuisine	Casual Dining	Eating & Drinking
	241	Jame Enoteca	Casual Dining	Eating & Drinking
	229	Havana Sandwich Company	Other Fast Food	Eating & Drinking
	225	Small Cakes	Bakery	Eating & Drinking
	223	Vacant	Vacant	Vacant
	219	Sausal	Casual Dining	Eating & Drinking
	143	Rock & Brews	Casual Dining	Eating & Drinking
	137	Dornblasters	Salon/Spa/Barber/Nails	Service/Office
	135	Jeffery S. Rhind, DDS	Medical Office	Service/Office

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
	123	The Tavern on Main	Casual Dining	Eating & Drinking
	117	Little Gourmet	Casual Dining	Eating & Drinking
	115	Insight Treatment Programs (mental health)	Medical Office	Service/Office
	111	Consulting.com HQ	Other Office	Service/Office
Main (north side)	130	I Love Teriyaki	Other Fastfood	Eating & Drinking
	136	Law Offices Sanford Jossen	Other Office	Service/Office
	136	Protection Law Group	Other Office	Service/Office
	140	El Segundo Brewing Company	Casual Dining	Eating & Drinking
	150	Bill Ruane Remax	Other Office	Service/Office
	200	Brewport Tap House	Casual Dining	Eating & Drinking
	208	ESMOA	Art	Specialty
	210	El Tarasco Mexican Food	Casual Dining	Eating & Drinking
	214	UPS Store	Other Storefront Service	Service/Office
	232	Chevron Gas Station	Gas Station	Automobile Related
	314	Fire Department	Fire Station	Civic
	348	Police Station	Police Station	Civic
	350	City Hall	City Hall	Civic
	400	Stuft Pizza	Casual Dining	Eating & Drinking
	402	Remax Bill Ruane	Other Office	Service/Office
	404	Holly Main Liquor	Liquor Store	Food
	408	Britt's BBQ and Catering	Casual Dining	Service/Office
	410	Fantastic Café	Upscale Fastfood	Eating & Drinking
	422	El Gringo	Casual Dining	Eating & Drinking
	424	Vacant	Vacant	Vacant
	426	Vacant	Vacant	Vacant
	428	Vacant	Vacant	Vacant
	432	Stacy Kaine on Main	Salon/Spa/Barber/Nails	Service/Office
	436	4Star Iron Works Gym	Health/Fitness (gyms, yoga, etc.)	Service/Office
	444	Colors Custom Furniture	Home Décor	Furnishings & Appilances
	446	Wilding Wall Beds	Home Décor	Furnishings & Appilances
	450	Tapizon	Casual Dining	Eating & Drinking
	500	Etzler Chiropractic	Medical Office	Service/Office
	502	State Farm Ed Barnhart	Other Office	Service/Office

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
		506 Amazon, UPS, Fedex, USPS	Other Storefront Service	Service/Office
		508 All State	Other Office	Service/Office
		512 Active Media Interest, Suite 1	Other Office	Service/Office
		512 Miracle Mile Community Practice, Suite 2	Medical Office	Service/Office
		512 Gimlen Orthodontics, Suite 3	Medical Office	Service/Office
		512 Hutchinson Dental, Suite 4	Medical Office	Service/Office
		520 El Segundo Masonic Center	Senior/Community Center	Civic
		540 United Methodist Church	Church	Church
Richmond (south side)		361 St. Michael's Episcopal Church	Church	Church
		349 MindSet Collective Physical Therapy	Medical Offices	Service/Office
		347 Cadman Group Commercial Real Estate	Other Offices	Service/Office
		345 Natural Simplicity	Florist	Specialty
		343 World Gallery (vinyl books)	Other Specialty Retail	Specialty
		337 Studio Antiques	Antiques	Specialty
		333 Richmond St. Counseling Center	Medical Offices	Service/Office
		331 Touch Institute, Skin Therapy	Medical Offices	Service/Office
		327 Face Place and More	Salon/Spa/Barber/Nails	Service/Office
		323 Schofield Reality	Other Offices	Service/Office
		321 Tina's Nails and Spa	Salon/Spa/Barber/Nails	Service/Office
		319 Farmers Insurance	Other Offices	Service/Office
		315 Marz Construction	Other Offices	Service/Office
		305 About Space, LLC Interior Design	Other Offices	Service/Office
		225 Mama D's Italian Resturant	Casual Dining	Eating & Drinking
		223 Second City Bistro	Casual Dining	Eating & Drinking
		221 Purple Orchid	Bar	Eating & Drinking
		215 Transport Workers Union/TWU Local 502	Other Offices	Service/Office
		211 El Segundo Door Company	Other Offices	Service/Office
		209 Haydenshapes Surfboards	Other Offices	Service/Office
		203 Paragon Communities Inc/Real Estate	Other Offices	Service/Office
		Vacant corner lot/building under construction		
		145 Richmond Bar & Grill	Casual Dining	Eating & Drinking
		143 unmarked business		
		139 Metz & Harrison LLP	Other Offices	Service/Office

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
	135	XTMA	Health/Fitness (gyms, yoga, etc.)	Service/Office
	127	Richmond Salon	Salon/Spa/Barber/Nails	Service/Office
	123	StrongProject (Modern Office Furniture)	Home Décor	Furnishings/Appliances
	117	The Traditional Barber	Salon/Spa/Barber/Nails	Service/Office
	115	The Old Town Patio	Bar	Eating & Drinking
Richmond (North side)	140	Old Town Music Hall	Live Theater	Entertainment/Recreation
	142	Boundary	Casual Dining	Eating & Drinking
	144	Studio Joseph Watts	Art	Specialty
	146	Art Studio	Art	Specialty
	200	Public Parking	Public Parking	Civic
	218	Kumon	Other Offices	Service/Office
	220	Eriss Salon	Salon/Spa/Barber/Nails	Service/Office
	222	George's Barber Shop	Salon/Spa/Barber/Nails	Service/Office
	300	99 Cent Store	Discount/Dollar Store	General Merchandise
Grand (East side)	302	El Segundo Optometry, Suite 1	Medical Offices	Service/Office
	302	Lara Priest, Suite 2	Medical Offices	Service/Office
	302	Linda Peterson & Associates, Suite 3	Medical Offices	Service/Office
	302	Clear View Financial Planning, Suite 4	Other Offices	Service/Office
	302	Peopleware Staffing, Suite 5	Other Offices	Service/Office
	302	Paul Hanson Engineering, Suite 6	Other Offices	Service/Office
	302	Verch Inserance, Suite 7	Other Offices	Service/Office
	302	Brian Mattson, MA, MFT, Suite 9	Other Offices	Service/Office
	302	Madama Performance Xpand, Suite 10	Health/Fitness (gyms, yoga, etc.)	Service/Office
	228	Aiport Cleaners	Other Storefront Services	Service/Office
	226	Vacant	Vacant	Vacant
	222	Queen Nails	Salon/Spa/Barber/Nails	Service/Office
	220	Valdes & Associates	Other Offices	Service/Office
	218	Robert F. Ashley	Other Offices	Service/Office
	210	Tonsoral Parlor	Salon/Spa/Barber/Nails	Service/Office
	208	Nicol	Other Offices	Service/Office
	206	Vacant	Vacant	Vacant
	204	Kelly's Beach Hut	Other Specialty Retail	Specialty
	200	El Segundo Doors & Windows	Other Specialty Retail	Specialty
	130	Slice and Pint	Casual Dining	Eating & Drinking

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
Grand (West side)	120	The Powder Room Hair Salon	Salon/Spa/Barber/Nails	Service/Office
	118	Dipped Ice Cream	Ice Cream/Yogurt/Juice	Eating & Drinking
	116	Guaranty Escrow Inc.	Other Offices	Service/Office
	275	Citizens Business Bank	Bank	Service/Office
	110	Beach Cty Hair Design	Salon/Spa/Barber/Nails	Service/Office
	112	LPL Financial	Other Offices	Service/Office
	114	Vacant	Vacant	Vacant
	301	El Segundo Preschool Academy	Private preschool	Civic
	227	Flegenheimer International, Inc.	Other Offices	Service/Office
	219	Sweet Spot Media - advertising agency	Other Offices	Service/Office
	209	Studio Pilates	Health/Fitness (gyms, yoga, etc.)	Service/Office
	203	Frocks & Rocks	Women's Apparel	Apparel
	201	Alex Abad Real Estate Group	Other Offices	Service/Office
	131	Good Stuff Resturant	Casual Dining	Eating & Drinking
	131B	Calleros Dental	Medical Offices	Service/Office
	131	Metro Café Resturant	Casual Dining	Eating & Drinking
	121	Athletic Grace Dance Studio	Health/Fitness (gyms, yoga, etc.)	Service/Office
	111	Westside Websites Engineering Service	Other Offices	Service/Office
	109	Image Solutions (Data, Outreach, Web, Mail)	Other Offices	Service/Office
107	Wendy's Place Café	Casual Dining	Eating & Drinking	
105	Vacant	Vacant	Vacant	
350	City Hall	Civic Center	Civic	
205	City Cuts by Maggie	Salon/Spa/Barber/Nails	Service/Office	
Grand (East side)	203	South Bay Industrial Hardware	Lock & Key Store	Hardware
	204	WCK (doors and windows)	Other Storefront Services	Service/Office
	220	Rite Aid	Drug Store	General Merchandise
	310	Starbucks, Suite 113	Coffee/Tea	Eating & Drinking
	310	Ensenada's Surf & Turf, Suite 112	Casual Dining	Eating & Drinking
	310	Aristo Mediterranean Café, Suite 111	Casual Dining	Eating & Drinking
	310	Fantastic Sam's, Suite 110	Salon/Spa/Barber/Nails	Service/Office
	310	Vinny's Pizza, Suite 104	Casual Dining	Eating & Drinking
	310	Stix & Straws, Suite 100	Casual Dining	Eating & Drinking
	310	Door to Door Valet Cleaners & Tailors	Other Storefront Services	Service/Office
310	Grand Othodontics, Suite 106	Medical Offices	Service/Office	

**Table D-1
Storefront Tenant List
Downtown El Segundo**

Street Name	Street Address	Business Name	Business Category	Major Category
		310 St. Antony Pharmacy, Suite 105	Medical Offices	Service/Office
		310 Enterprise Rental Car, Suite 103	Automobile Service	Automobile Related
		310 El Segundo Modern Dentistry, Suite 102	Medical Offices	Service/Office
Standard (North side)		130 Chase Bank, Suite A	Bank	Service/Office
		130 Champion Vibes, Suite C	Salon/Spa/Barber/Nails	Service/Office
		130 Siam Bay Thai Food, Suite D	Other Fastfood	Eating & Drinking
		130 Blimpie American Sub Shop, Suite E	Other Fastfood	Eating & Drinking
		130 Cold Stone, Suite F	Ice Cream/Yogurt/Juice	Eating & Drinking
		130 Domino's Pizza, Suite G	Other Fastfood	Eating & Drinking
		130 Jing Spa, Suite H	Salon/Spa/Barber/Nails	Service/Office
		130 Coast Nails, Suite J	Salon/Spa/Barber/Nails	Service/Office
		130 Sushi Avenue, Suite K	Other Fastfood	Eating & Drinking
		130 Vacant (Suite F)	Vacant	Vacant
Standard (South side)		214 State Farm Insurance	Other Offices	Service/Office
		226 Standard Station Sports Bar & Grill	Casual Dining	Eating & Drinking
		208 Glentek (Solutions for Motion Control)	Other Offices	Service/Office
Eucalyptus		200 block El Segundo Pet Resort	Other Storefront Services	Service/Office

**Table D-2
Storefront Tenant List
Downtown Culver City**

Street Name	Street Address	Business Name	Business Category	Major Category	
Main (North side)	3806	The Ripped Bodice Books	Books	Speciality	
	3806	Main Street Salon	Salon/Spa/Barber/Nails	Service/Office	
	3808	Dry Bar Hair Salon	Salon/Spa/Barber/Nails	Service/Office	
	3812	The Massage Garage	Salon/Spa/Barber/Nails	Service/Office	
	3816	Playa Reality Boutique	Other Office	Service/Office	
	3826	Grand Casino	Casual Dining	Eating & Drinking	
	3830	Gratitude Market Artisan Food and Gifts	Other Specialty Food	Food	
	3838	Academy of Beauty Beauty School	Other Office	Service/Office	
	3840	Dr Katya S. Zelaya, OD Optometry	Medical Office	Service/Office	
	3842	Hearing Aid Professionals	Medical Office	Service/Office	
	3850	Piccalilli	Casual Dining	Eating & Drinking	
	3850	Janga by Derrick's Jamaican	Casual Dining	Eating & Drinking	
	Main (South side)	9400	Armand's Fireplace & BBQ (Venice Bl. Address)	Appliance	Furnishings & Appliances
		3809	Church Hill Antiques	Antiques	Speciality
		3815	Youth Fill Medspa	Salon/Spa/Barber/Nails	Service/Office
		3819	La Rocca's Pizza	Casual Dining	Eating & Drinking
3821		Color & Craft Salon on Main	Salon/Spa/Barber/Nails	Service/Office	
3825		Aldea Home & Baby, Nursery & Baby Store	Other Specialty Food	Service/Office	
3829		Ms. Chi Dumpling/Noodle Restaurant	Casual Dining	Eating & Drinking	
3833		Vamonos Tacos	Casual Dining	Eating & Drinking	
3835		Potatoe Chips Deli	Upscale Fastfood	Eating & Drinking	
3837		Novecento Pasta & Grill	Casual Dining	Eating & Drinking	
3839		Scoot Education Education Staffing Partner	Other Office	Service/Office	
3843		Rocco's Tavern	Casual Dining	Eating & Drinking	
3847		Upper Crust Pizza	Casual Dining	Eating & Drinking	
3849		Monty's Good Burger	Casual Dining	Eating & Drinking	
3851		Latea	Coffee/Tea	Eating & Drinking	
Culver (North side)	9290	Trader Joe's	Other Specialty Food	Food	
	9300	Vacant	Vacant	Vacant	
	9300	Sephora	Other Specialty Retail	Speciality	
	9300	Salt & Straw	Ice Cream/Yogurt/Juice	Eating & Drinking	

**Table D-2
Storefront Tenant List
Downtown Culver City**

Street Name	Street Address	Business Name	Business Category	Major Category
	8850	Vacant (closed bagel shop)	Vacant	Vacant
	9300	Philz Coffee	Coffee/Tea	Eating & Drinking
	9300	Public Parking Garage	Public Parking	Civic Buildings
	9400	Culver Hotel	Hotel	Other
	9512	Chipotle	Upscale Fastfood	Eating & Drinking
	9514	Cold Stone	Ice Cream/Yogurt/Juice	Eating & Drinking
	9516	Yalla Mediterranean	Casual Dining	Eating & Drinking
	9540	Fifty One Chinese Restaurant	Casual Dining	Eating & Drinking
	9546	Rush	Casual Dining	Eating & Drinking
	9552	Wise Sons Jewish Delectatessen	Upscale Fastfood	Eating & Drinking
	9600	Culver City Fire Department	Fire Station	Civic Buildings
	9696	Meralta Office Plaza	Other Office	Service/Office
	9770	City Hall	City Hall	Civic Buildings
	9900	Village Well Books & Coffee	Books	Speciality
	90232	US Post Office	Post Office	Civic Buildings
	10000	Sweet Flower	Florist	Speciality
	10054	Psychic Miss Molly	Other Storefront Service	Service/Office
	10052	Plant Mama	Florist	Speciality
	10054	Coffee Cyclery	Coffee/Tea	Eating & Drinking
Culver (South side)	9341	Kay n Dave's Mexican Cantina	Casual Dining	Eating & Drinking
	9343	Cava	Upscale Fastfood	Eating & Drinking
	9345	Chicas Nachos Burritos Bowls	Upscale Fastfood	Eating & Drinking
	9355	Citizen Public Market Food Court	Upscale Fastfood	Eating & Drinking
	9375	The Auld Fella Irish Joint	Bar	Eating & Drinking
	9415	Blank Spaces, Community of Entrepreneurs	Other Office	Service/Office
	9441	Timeless Treasures Ticktocker Thrift Shop	Other Specialty Retail	Speciality
	9453	Vacant (previously bank building)	Vacant	Vacant
	3865	Ugo Café (Cardiff Ave/corner)	Casual Dining	Eating & Drinking
	9517	Wonderful World Art Gallery/Animation Art	Art	Speciality
	9523	Tender Greens	Casual Dining	Eating & Drinking
	9531	Arth Bar & Kitchen Indian Restaurant	Casual Dining	Eating & Drinking
	9537	Honey's Kettle Fired Chicken	Upscale Fastfood	Eating & Drinking

**Table D-2
Storefront Tenant List
Downtown Culver City**

Street Name	Street Address	Business Name	Business Category	Major Category
	9543	Akasha	Casual Dining	Eating & Drinking
	9725	Sestina Pasta Bar	Casual Dining	Eating & Drinking
	9727	Meet in Paris, French Bistro	Casual Dining	Eating & Drinking
	9729	Sake House	Casual Dining	Eating & Drinking
	9739	City Tavern	Casual Dining	Eating & Drinking
	9755	Café Viola	Casual Dining	Eating & Drinking
Washington (South side)	9705	Alandale's	Men's Apparel	Apparel
	9703	State Farm	Other Office	Service/Office
	9707	Men's Clothing Store	Men's Apparel	Apparel
	9711	Soul Play Yoga	Health/Fitness (gyms, yoga, etc.)	Service/Office
	9715	Wild Child	Health/Fitness (gyms, yoga, etc.)	Service/Office
	9735	Vacant (offices)	Vacant	Vacant
	9801	Chase Bank	Bank	Service/Office
Washington (North side)	9718	Starbucks	Coffee/Tea	Eating & Drinking
	9724	Antunovich Associates/Architecture, Int. Design	Other Office	Service/Office
	9726	Lundeen's, (Gifts, Cards, Books, Baby)	Other Specialty Retail	Speciality
	9748	S & W Country Diner	Casual Dining	Eating & Drinking
	9810	Vacant (closed restaurant)	Vacant	Vacant
	9820	Kirk Douglas Theater	Movie Theater	Entertainment/Recreation
	10000	One Culver Parking	Public Parking	Civic Buildings
	10000	One Culver Office Building	Other Office	Service/Office
	10000	One Medical	Medical Office	Service/Office
	10000	Go Get Em Tiger (Food Delivery Service)	Other Specialty Food	Food
	10000	WeWork Office Space & Coworking	Other Office	Service/Office

**Table D-3
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
Pier Avenue (East Side)	550	Public Library	Library	Civic Buildings
	540	Fire Station	Fire Station	Civic Buildings
	526	Stars Antique Market	Antiques	Specialty
	518	Bikram Yoga	Health/Fitness (gyms, yoga,etc.)	Service/Office
	506	Vacant	Vacant	Vacant
	440	Door to Door Vallet Cleaners	Other Storefront Service	Service/Office
	430	The Bike Shop	Other Storefront Service	Service/Office
	426	State Farm Insurance	Other Office	Service/Office
	424	Crème De La Crepe Resturant and Creperie	Casual Dining	Eating & Drinking
	424	Craft House & Gastro Pub	Casual Dining	Eating & Drinking
	418	The Rockefeller	Fine Dining	Eating & Drinking
	400	Marlin Equity Partners	Other Office	Service/Office
	338	Marlin Equity Partners	Other Office	Service/Office
	316	Fritto Misto Italian Café	Casual Dining	Eating & Drinking
	312	Marx Pier Ave	Salon/Spa/Barber/Nails	Service/Office
	308	Two Guns Espresso	Coffee/Tea	Eating & Drinking
	302	Uncorked Wine Tasting	Wine/Gourmet	Food
	240	Abe's Liquor	Liquor Store	Food
	238	Gum Tree Shop and Café	Casual Dining	Eating & Drinking
	200	Pier Conference Room	Other Office	Service/Office
	201	Hermosa Supply	Men's Apparel	Apparel
	202	Hermosa Barber Shop & Supply	Salon/Spa/Barber/Nails	Service/Office
	203	Details Shoes & Accessories	Shoes	Apparel
	204	Palm Reality Boutique	Other Office	Service/Office
	205	Bikini Junkie	Other Apparel	Apparel
	200	Amaloha Healing Arts	Other Specialty Retail	Specialty
	301	Hamilton Butler Jewels	Jewelry	Specialty
	140	Mike's Guitar Parlor	Other Specialty Retail	Specialty
	138	Maison Luxe Interior Design	Home Décor	Furnishings & Appliances
	136	Cultured Slice Sandwich Shop (Coming Soon)	Casual Dining	Eating & Drinking
128	Curious... Still Curious Gift Shop	Other Specialty Retail	Specialty	

**Table D-3
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
		124 Sol Baby	Children's Apparel	Apparel
		120 Chamber of Commerce Visitor Center	Senior/Community Center	Civic Buildings
		118 Tacos el Goloso	Upscale Fastfood	Eating & Drinking
		116 Blue Rose	Women's Apparel	Apparel
		114 Beach Bound Sports	Other Storefront Service	Service/Office
		112 Fundamental Coast	Women's Apparel	Apparel
		1150 Zane's Restaurant (Hermosa Ave)	Casual Dining	Eating & Drinking
		90 Bank of America	Bank	Service/Office
		74 Robert's Liquor	Liquor Store	Food
		68 American Junkie	Casual Dining	Eating & Drinking
		52 Baja Sharkeez	Casual Dining	Eating & Drinking
		50 Patrick Molloy's	Casual Dining	Eating & Drinking
		50 Treasure Chest Souvenir Shop	Other Specialty Retail	Specialty
		36 Greenbelt	Casual Dining	Eating & Drinking
		34 Juiced	Ice Cream/Yogurt/Juice	Eating & Drinking
		30 Lighthouse Café	Casual Dining	Eating & Drinking
		22 Waterman's	Casual Dining	Eating & Drinking
		26 Surf City Hostel	Other Storefront Service	Service/Office
		20 Silvio's Craft Beer & BBQ	Casual Dining	Eating & Drinking
		8 Hennessey's Tavern	Casual Dining	Eating & Drinking
Pier Avenue (West Side)		565 U.S. Post Office	Post Office	Civic Buildings
		565 Miss Bee's Tutoring	Other Office	Service/Office
		555 Hermosa Professional Building	Other Office	Service/Office
		555 Hermosa Beach Law Offices	Other Office	Service/Office
		555 University Spine and Pain Center/Surgery	Medical Office	Service/Office
		555 Hermosa Beach Escrow, Inc.	Other Office	Service/Office
		555 FORM Pilates LA	Health/Fitness (gyms, yoga,etc.)	Service/Office
		555 Edward Jones Investments	Other Office	Service/Office
		555 Skin Medix Medical Spa/Laser Center	Medical Office	Service/Office
		555 Accudata Incorporated	Other Office	Service/Office
		555 Kinecta Federal Credit Union	Bank	Service/Office
		555 Deutsch Vera DDS	Medical Office	Service/Office

Table D-3
Storefront Tenant List
Downtown Hermosa Beach

Street Name	Street Address	Business Name	Business Category	Major Category
	515 Baker, Burton & Lundy	Law Offices	Other Office	Service/Office
	511 Wash & Surf	Laundry Mat	Other Storefront Service	Service/Office
	509	The Source Café	Casual Dining	Eating & Drinking
	507	The Solution/Personalized Nutrition Hydration	Medical Office	Service/Office
	507	True North Cryo	Salon/Spa/Barber/Nails	Service/Office
	505	Five Zero Five Salon	Salon/Spa/Barber/Nails	Service/Office
	439	Sosta Italian Restaurant	Casual Dining	Eating & Drinking
	433	Bow Wow Boutique	Other Storefront Service	Service/Office
	1729	The Hook and Plow (Catalina Ave)	Casual Dining	Eating & Drinking
	423	Hermosa Lock & Safe	Lock & Key Store	Hardware
	421	Sweet Bloom	Florist	Specialty
	419	Maximus	Salon/Spa/Barber/Nails	Service/Office
	415	Pier Medical Aesthetics: Douglas Mest, MD	Medical Office	Service/Office
	405	Mimosa	Salon/Spa/Barber/Nails	Service/Office
	337	El Tarasco	Casual Dining	Eating & Drinking
	327	Sand Spa	Salon/Spa/Barber/Nails	Service/Office
	323	Beck & Brix	Salon/Spa/Barber/Nails	Service/Office
	321	Kalihi	Women's Apparel	Apparel
	301	Becker Surfboards	Other Specialty Retail	Specialty
	239	Caskey & Caskey and Associates Real Estate	Other Office	Service/Office
	215	Critical Mass Group Llc Brand Accelerator	Other Office	Service/Office
	215	Beach Coast Insurance	Other Office	Service/Office
	205	Vacant	Vacant	Vacant
	157	Java Man	Coffee/Tea	Eating & Drinking
	145	Wicked+ A General Store	Other Specialty Retail	Specialty
	137	Royce Gracie Jiu Jitsu	Health/Fitness (gyms, yoga,etc.)	Service/Office
	135	Beach & Beverly	Women's Apparel	Apparel
	133	Jessica Rose	Salon/Spa/Barber/Nails	Service/Office
	131	Powers Reality	Other Office	Service/Office
	127	Psychic Readings by Michelle	Other Storefront Service	Service/Office
	117	Steak & Whisky American Tavern	Casual Dining	Eating & Drinking
	1200	Rok Sushi Restaurant	Casual Dining	Eating & Drinking

**Table D-3
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
		81 Citi Bank	Bank	Service/Office
		73 The Brews Hall	Casual Dining	Eating & Drinking
		65 Spyder Surfboards	Other Specialty Retail	Specialty
		53 Tower 12 Café	Casual Dining	Eating & Drinking
		49 Skin Savvy Medical Spa	Salon/Spa/Barber/Nails	Service/Office
		49 The Baked Bar	Ice Cream/Yogurt/Juice	Eating & Drinking
		39 Palmilla Cocina y Tequilla	Casual Dining	Eating & Drinking
		25 Surf Store (closing)	Other Specialty Retail	Specialty
		19 Playa Hermosa Fish & Oyster Co.	Casual Dining	Eating & Drinking
Hermosa (South side)	1505	Bright Cleaners	Other Storefront Service	Service/Office
	1503	Delush	Salon/Spa/Barber/Nails	Service/Office
	1500	Chef Melbas Bistro	Casual Dining	Eating & Drinking
	1429	Office (unmarked)	Other Office	Service/Office
	1411	Vacant	Vacant	Vacant
	1409	Vacant	Vacant	Vacant
	1407	Vacant	Vacant	Vacant
	1403	C.ERA Apparel (Surf Shop)	Other Specialty Retail	Specialty
	1401	Bila Bila Skate (Skateboard Shop)	Other Specialty Retail	Specialty
	1325	Beach Market	Convenience Market	Food
	1309	Soo Good Snack Bar	Ice Cream/Yogurt/Juice	Eating & Drinking
	1305	Starbucks	Coffee/Tea	Eating & Drinking
	1227	Vacant	Vacant	Vacant
	1223	Chase Bank	Bank	Service/Office
	1031	Crafty Minds Brews + Bites	Casual Dining	Eating & Drinking
Hermosa (North side)	1342	Hermosa Brewing Co	Casual Dining	Eating & Drinking
	1332	Fox and Farrow	Casual Dining	Eating & Drinking
	1332	Pedone's Pizza	Casual Dining	Eating & Drinking
	1332	Decadance	Casual Dining	Eating & Drinking
	1320	Agave Azul Kitchen & Tequila Bar	Casual Dining	Eating & Drinking
	1314	Vacant	Vacant	Vacant
	1314	Japonica Sushi	Casual Dining	Eating & Drinking
	1312	Laser Away	Salon/Spa/Barber/Nails	Service/Office

**Table D-3
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
	1248	Coastal Lane Nail Bar	Salon/Spa/Barber/Nails	Service/Office
	1246	Paradise Bowls	Ice Cream/Yogurt/Juice	Eating & Drinking
	1244	Vacant	Vacant	Vacant
	1242	Soho Yoga	Health/Fitness (gyms, yoga,etc.)	Service/Office
	1238	Dia De Campo	Casual Dining	Eating & Drinking
	1212	Scott Seymour Jewelers	Jewelry	Specialty
	1150	Zane's Restaurant (Hermosa Ave)	Casual Dining	Eating & Drinking
	1138	Lunara Gifts	Other Specialty Retail	Specialty
	1140	Costumes	Other Specialty Retail	Specialty
	1136	Flying Sirens Music Shop	Other Specialty Retail	Specialty
	1132	Paisanos New York Pasta & Pizza	Casual Dining	Eating & Drinking
	1128	Michelle's	Women's Apparel	Apparel
	1124	Vacant	Vacant	Vacant
	1120	Poke & Boba	Upscale Fastfood	Eating & Drinking
	1116	Nail Bay	Salon/Spa/Barber/Nails	Service/Office
	1112	Lucky 7 Coffee	Coffee/Tea	Eating & Drinking
	1106	The Yard Fitness Center	Health/Fitness (gyms, yoga,etc.)	Service/Office
	1048	Rose Cleaners	Other Storefront Service	Service/Office
	1046	Santo	Salon/Spa/Barber/Nails	Service/Office
	1040	Red & Louie's Pizzeria	Casual Dining	Eating & Drinking
	1038	F45 Training	Health/Fitness (gyms, yoga,etc.)	Service/Office
	1036	BestSwimwear	Other Apparel	Apparel
	1034	Paciugo Gelato	Ice Cream/Yogurt/Juice	Eating & Drinking
	1018	Comedy and Magic Club	Live Theater	Entertainment/Recreation

**Table D-4
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category	
Highland (West side)	1419	Palm Reality Boutique Real Estate	Other Office	Service/Office	
	1401	RE/MAX	Other Office	Service/Office	
	1309	Uncle Bill's Pancake House	Casual Dining	Eating & Drinking	
	1221	Ducha Beach Gift Shop	Other Specialty Retail	Specialty	
	1217	Pacific Coast Gallery	Art	Specialty	
	1215	Corcoran Global Living Real Estate	Other Office	Service/Office	
	1209	Rockefeller grub and craft beers	Casual Dining	Eating & Drinking	
	1203	by Musti	Jewelry	Specialty	
	1201	Growing Wild	Florist	Specialty	
	1147	Engel & Volkers Real Estate	Other Office	Service/Office	
	1145	Palm Reality Boutique Real Estate	Other Office	Service/Office	
	1141	Mbanc Mortgage Lender	Other Office	Service/Office	
	1141	Bliss Nail Lounge	Salon/Spa/Barber/Nails	Service/Office	
	1141	Musette	Women's Apparel	Apparel	
	1133	The IZAKA-YA by KATSU-YA Japanese Resturant	Casual Dining	Eating & Drinking	
	233	Starbucks	Coffee/Tea	Eating & Drinking	
	232	Wrights, Suite A	Women's Apparel	Apparel	
	232	Harry's Cleaners and Shoe Repair, Suite C	Other Storefront Service	Service/Office	
	1103	Beach Cities Optometry	Medical Office	Service/Office	
	Highland (East side)	1400	Manhattan Beach City Hall	City Hall	Civic Buildings
		1320	Manhattan Beach Library	Library	Civic Buildings
		1300	Highland Lofts, Work Lofts	Other Office	Service/Office
		1300	Kreaton Organics, Suite 110	Other Specialty Food	Food
1300		Good Boy Bob Coffee Roasters, Suite 109	Coffee/Tea	Eating & Drinking	
1300		Pure Men's Barber Shop & Essentials, Suite 108	Salon/Spa/Barber/Nails	Service/Office	
1300		Vacant, Suite 107	Vacant	Vacant	
1300		Birdwell Beach Britches	Women's Apparel	Apparel	
1220		Mark Lowerre Attorney at Law	Other Office	Service/Office	
1212		Bates Chiropractic	Medical Office	Service/Office	
1213		Corcoran Global Living Real Estate	Other Office	Service/Office	
1200		Bank Of America	Bank	Service/Office	
1146		Ya Ya's Men's and Women's Assessories	Other Apparel	Apparel	
1144		Vista Sotheby's International Realty	Other Office	Service/Office	
1140		Current Events Magazines/Newspapers/PO Boxes	Other Storefront Service	Service/Office	

**Table D-4
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
Manhattan (North side)	1140	Un Caffé Altamura	Casual Dining	Eating & Drinking
	1138	The Kettle Resturant	Casual Dining	Eating & Drinking
	1148	Fishing with Dynamite	Casual Dining	Eating & Drinking
	201	Chase Bank	Bank	Service/Office
	1116	Manhattan Beach Creamery	Ice Cream/Yogurt/Juice	Eating & Drinking
	1116	Spyder Surfboards	Other Specialty Retail	Specialty
	1112	Vacant	Vacant	Vacant
	1108	Bo Bridges Gallery	Art	Specialty
	102	Vacant	Vacant	Vacant
	1100	Door to Door Vallet Cleaners	Other Storefront Service	Service/Office
	1020	The Shade Store Shades and Blinds	Home Décor	Furnishings & Appliances
	1016	Rolling Hills Flower Mart	Florist	Specialty
	1014	Kate Lester Home	Home Décor	Furnishings & Appliances
	1012	Margaret O'Leary	Women's Apparel	Apparel
	1012	Kalini	Women's Apparel	Apparel
	1010	Manhattan Shoe Repair	Other Storefront Service	Service/Office
	1008	Finders KeepHers Consignment Shop	Other Apparel	Apparel
	1006	Hush	Salon/Spa/Barber/Nails	Service/Office
	1000	All Yoo	Women's Apparel	Apparel
	1000	Uncorked The Wine Shop	Wine/Gourmet	Food
	920	Manhattan Denim	Other Apparel	Apparel
	916	Sotheby's Real Estate	Other Office	Service/Office
	912	Waverly Boutique	Women's Apparel	Apparel
	912	Fino Manhattan	Women's Apparel	Apparel
904	Dan Deutsch Sunglasses	Other Specialty Retail	Specialty	
904	Pages Bookstore	Books	Specialty	
900	Sand Bar 66	Bar	Eating & Drinking	
820	Rice	Casual Dining	Eating & Drinking	
808	Health Center & Spa	Medical Office	Service/Office	
808	John Post Gallery	Art	Specialty	
Manhattan (South side)	1203	Manhattan Barber Shop	Salon/Spa/Barber/Nails	Service/Office
	1201	Go Gently Nation	Other Apparel	Apparel
	1151	Bardot Salon	Salon/Spa/Barber/Nails	Service/Office
	1149	CorpoBonito Wear swimsuits	Other Apparel	Apparel

**Table D-4
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
		1147 Dominic	Salon/Spa/Barber/Nails	Service/Office
		1145 Family Vision Care, Lori J. Clark O.D.	Medical Office	Service/Office
		1141 Slat Resturant	Fine Dining	Eating & Drinking
		1129 Mando Trattoria	Fine Dining	Eating & Drinking
		1128 Tacolicious	Casual Dining	Eating & Drinking
		1127 Dash Dashi Sushi Grill Sake Bar	Casual Dining	Eating & Drinking
		1125 Founded 1912	Women's Apparel	Apparel
		1121 Sketchers	Shoes	Apparel
	1100 Block	Sketchers Performance	Other Apparel	Apparel
		1111 Manhattan Grocery	Other Specialty Food	Food
		1101 Ercale's Mexican Resturant	Casual Dining	Eating & Drinking
		1025 Becker's Bakery & Deli	Bakery	Eating & Drinking
		1017 PA-DO Dumbling & Noodle Bar	Casual Dining	Eating & Drinking
		1009 Blue Diamond Jeweler	Jewelry	Specialty
		1007 Riley Arts, Fine Arts Gallery	Art	Specialty
		1005 El Sambrero Mexican Food	Casual Dining	Eating & Drinking
		1001 Slay Italian Kitchen	Fine Dining	Eating & Drinking
		919 Tabula Rasa Essentials Gift Shop, #A	Other Specialty Retail	Specialty
		919 Cielo A Boutique Salon, #C	Salon/Spa/Barber/Nails	Service/Office
		919 Paradise Bowls, #D	Other Fast Food	Eating & Drinking
		919 Nikau Kai Waterman Shop, #E	Other Apparel	Apparel
		903 The Arthur J Resturant	Fine Dining	Eating & Drinking
		815 Analytics WEST Econ, Forensic Accounting #E	Other Office	Service/Office
		815 Neolle Interiors Design House, #C	Home Décor	Furnishings & Appliances
		815 Cotton Cargo, #A	Women's Apparel	Apparel
		815 Bespoke by Chase #B	Men's Apparel	Apparel
Manhattan Beach Blvd (East side)	100 Block	Public Parking Lot	Public Parking (City owned)	Civic Buildings
		116 Shellback Tavern	Bar	Eating & Drinking
		120 Rock'n Fish Resturant	Casual Dining	Eating & Drinking
		124 Brew Co Resturant & Bar	Casual Dining	Eating & Drinking
		128 Mangiamo Resturant & Bar	Fine Dining	Eating & Drinking
		208 3rd Gallery Michael Stars	Women's Apparel	Apparel
		212 Harper And Harlow	Women's Apparel	Apparel
		228 Bob's from Sketcher's	Shoes	Apparel

**Table D-4
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
	232	Wright's	Other Apparel	Apparel
	300	Free People	Women's Apparel	Apparel
	300	Marine Layer	Other Apparel	Apparel
	308	Gelato and Angels	Ice Cream/Yogurt/Juice	Eating & Drinking
	310	Pressed Juicery	Ice Cream/Yogurt/Juice	Eating & Drinking
	312	Katwalk	Women's Apparel	Apparel
	316	Cami	Women's Apparel	Apparel
	318	Scala	Shoes	Apparel
	320	Attamura Real Estate	Other Office	Service/Office
	320	BLVD	Women's Apparel	Apparel
	324	Gum Tree Gift Shop	Other Specialty Retail	Specialty
	324	Dinsmore & Sandelmann LLP Law Offices #201	Other Office	Service/Office
	328	Peet's Coffee & Tea	Coffee/Tea	Eating & Drinking
	330	Noah's Bagels	Bakery	Eating & Drinking
	400	Union Bank	Bank	Service/Office
	410	Vons	Supermarket	Food
Manhattan Beach Blvd (West side)	100	Public Parking Lot	Public Parking (City owned)	Civic Buildings
	117	The Strand House	Bar	Eating & Drinking
	133	Manhattan Pizzeria	Casual Dining	Eating & Drinking
	209	Everything But Water	Other Apparel	Apparel
	211	Vacant	Vacant	Vacant
	217	Pasha	Jewelry	Specialty
	223	Trendy Eyes Sunglasses	Other Specialty Retail	Specialty
	221	Wave's Manhattan Beach	Other Specialty Retail	Specialty
	225	Bella Beach	Children's Apparel	Apparel
	227	Hammitt	Other Specialty Retail	Specialty
	229	Simmzy's	Casual Dining	Eating & Drinking
	233	Starbucks	Coffee/Tea	Eating & Drinking
	309	Esperanza	Casual Dining	Eating & Drinking
	313	Hennessey's	Casual Dining	Eating & Drinking
	317	Love Salt	Casual Dining	Eating & Drinking
	321	Bluestone Lane	Coffee/Tea	Eating & Drinking
	327	Culture Brewing Co	Bar	Eating & Drinking
	329	Splendid	Other Apparel	Apparel

**Table D-4
Storefront Tenant List
Downtown Hermosa Beach**

Street Name	Street Address	Business Name	Business Category	Major Category
	333	Vuori	Other Apparel	Apparel
	401	Pitfire Artisan Pizza	Casual Dining	Eating & Drinking
	451	Vineyard Vine's	Other Apparel	Apparel
	451	Nordstrom Local	Other Apparel	Apparel
	451	Blue Star Donuts	Other Fast Food	Eating & Drinking
	451	Look Optometry	Medical Office	Service/Office
	451	LuLu's Novvella	Women's Apparel	Apparel
	451	Sweet Lady Jane	Bakery	Eating & Drinking
	451	Nick's Manhattan Beach	Casual Dining	Eating & Drinking
	451	Waterleaf Home and Gifts	Home Décor	Furnishings & Appliances
	451	Le Pain Quotidien	Casual Dining	Eating & Drinking
	451	Petros	Casual Dining	Eating & Drinking
	451	Trilogy Spa	Salon/Spa/Barber/Nails	Service/Office
	451	Lemonade	Ice Cream/Yogurt/Juice	Eating & Drinking
	451	The Beehive	Women's Apparel	Apparel
	451	Kasai Hair	Salon/Spa/Barber/Nails	Service/Office
Valley	1221	Shade Luxury Boutique Hotel	Hotel	Other

**APPENDIX I.2: LOCAL TRANSPORTATION
ASSESSMENT REPORT**

El Segundo Downtown Specific Plan Update

Local Transportation Assessment

Prepared for:
RRM Design Group, City of El Segundo

January 26, 2024

LB21-0042

FEHR  PEERS

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1. Introduction

This report documents the assumptions, methodologies, and findings of a non-CEQA (California Environmental Quality Act) Local Transportation Assessment (LTA) conducted by Fehr & Peers to identify future intersection operation conditions with the El Segundo Downtown Specific Plan Update (Project) in the City of El Segundo, California. The boundary of the Downtown Specific Plan Area (Project Area) is shown in **Figure 1-1**. The Project is proposed to enable the buildout of the Downtown Specific Plan area according to the land uses described in **Table 1-1**. The Project is also proposed to include the mobility enhancements described in **Section 3.3.1**. As the City of El Segundo does not have adopted guidance for intersection level of service (LOS) analysis, this LTA was conducted to in accordance with the Intersection Capacity Utilization (ICU) methodology described and utilized in the City of El Segundo General Plan Circulation Element¹.

1.1 Project Description

The Project Area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo, which is approximately 20 miles southwest from downtown Los Angeles. The Project Area is located southwest of the interchange of the Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. The Interstate 105 Freeway (I-105) is north of the Project Area, immediately north of Imperial Highway. The Project Area is bounded by Mariposa Avenue to the north and El Segundo Boulevard to the south. Los Angeles International Airport (LAX) is located to the north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east; the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west. **Figure 1-1** illustrates the Project Area.

The Project proposes the following net-new land uses in the Project Area, through 2040:

- Retail and Restaurant: 130,000 square feet
- Office: 200,000 square feet
- Medical Office: 24,000 square feet
- Residential Units: 300 units

The proposed net new land use quantities through 2040 are further described in **Table 1-1**.

¹ City of El Segundo, City of El Segundo General Plan Circulation Element, September 2004



Table 1-1: Project Net New Land Uses

Land Use	Units ¹	Net New (Through 2040)
Restaurant²	KSF	35.21
Grocery²	KSF	15.92
General Retail²	KSF	51.51
Hardware/Auto Parts²	KSF	3.00
Other Services²	KSF	24.36
General Office	KSF	200.00
Medical Office	KSF	24.00
Residential	DU	300

¹ KSF = Thousand Square Feet, DU = Dwelling Unit

² The DSP Project Description describes a combined total of 130 KSF for retail and restaurant. Breakdown of specific uses was estimated based on Table 1a and 1b in *Real Estate Demand Analysis for El Segundo DTSP Update (2022)* report produced by The Natelson Dale Group, Inc.

The Project also proposes a roadway modification of Main Street, Grand Avenue, and Richmond Street to enhance multimodal mobility. These preferred roadway sections are further discussed in **Section 3.3.1** and described in **Table 3-1**.



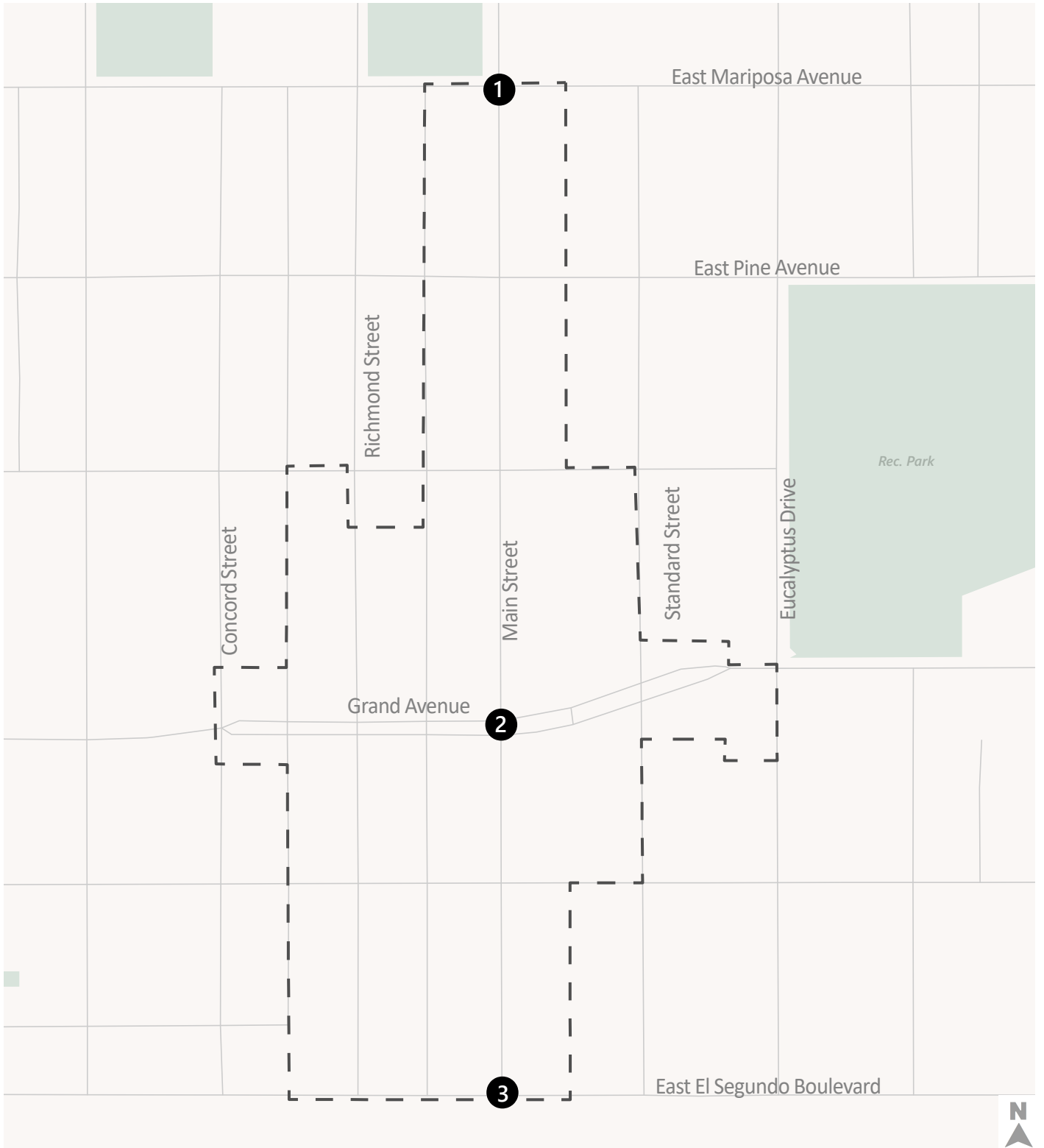


Figure 1-1



- Study Intersections
- Parks
- ┌─┐ Project Area

Study Intersections and Project Location

1.2 Transportation Scenarios

This study analyzes the potential project-generated traffic effects to the local street system under both Existing and Future traffic conditions. The following traffic scenarios have been developed and analyzed as part of this study:

- Existing Conditions – The existing conditions analysis includes a description of the transportation system serving the Project Area, existing traffic volumes, and an assessment of the operating conditions at the study analysis locations described below. This scenario is described in detail in **Chapter 2**.
- Future Base (Year 2040) Conditions – Future traffic projections without the proposed Project were developed for the year 2040. The objective of this analysis was to project future traffic growth and operating conditions that could be expected to result from regional growth, related projects, and transportation network changes in the vicinity of the Project site by the year 2040. This scenario is described in detail in **Chapter 3**.
- Future (Year 2040) with Project Conditions – This traffic scenario provides projected traffic volumes and an assessment of operating conditions under future conditions with the addition of Project-generated traffic. The effects of the proposed Project on future traffic operating conditions were then identified. This scenario is described in detail in **Chapter 3**.

1.3 Study Intersections

A total of three (3) intersections were selected for the analysis of the Project in consultation with the City of El Segundo staff. The study intersections and their control type are listed below.

1. Main Street & Mariposa Avenue (signalized)
2. Main Street & Grand Avenue (signalized)
3. Main Street & El Segundo Boulevard (all-way stop control)

1.4 Organization of this Report

This report is divided into four chapters, including this introduction. **Chapter 2** describes existing conditions including an inventory of the streets, highways, and transit service in the study area, a summary of existing traffic volumes, and an assessment of existing operating conditions. The methodologies used to develop traffic forecasts for the Future Base and Future plus Project scenarios and a description of future geometric and signal phasing enhancements are described in **Chapter 3**. **Chapter 4** presents an assessment of intersection traffic conditions with the addition of Project trips and future geometric and signal phasing enhancements.



2. Existing Conditions

Comprehensive data collection was conducted to develop a detailed description of existing conditions in the Project Area. The assessment of existing conditions includes a description of the Project Area, an inventory of the local street system, a review of traffic volume on these facilities, an assessment of the resulting operating conditions, and the current transit service in the study area. This chapter presents a detailed description of these elements.

2.1 Study Area

The approximately 43.8-acre Downtown Specific Plan (DSP) area is currently regulated by the 2000 City of El Segundo Downtown Specific Plan, a regulatory document which the Project would replace. Existing land uses within the Project Area include retail, restaurant, office, and residential, as described in **Table 1-1**. The DSP Area also includes various civic uses, such as El Segundo City Hall, the El Segundo Police Department (ESPD) headquarters, and El Segundo Fire Department (ESFD) Station #1. Because the Project Area defines specific boundaries within which Project land use buildout and conceptual roadway enhancements may occur, the Study Area in this analysis is defined as the Project Area, as shown in **Figure 1-1**. Thus, the terms Project Area and Study Area are used interchangeably in this LTA.

2.2 Existing Street System

Major streets serving the Project Area include El Segundo Boulevard, Grand Avenue, and Mariposa Avenue in the east-west direction and Main Street in the north-south direction. Regional access to the Project Site is provided by I-105 (Glenn Anderson Freeway), I-405 (San Diego Freeway) and CA-1 (Pacific Coast Highway/Sepulveda Blvd), with the nearest interchange approximately 1 mile to the northeast (I-105). Local access to the Project Area is provided by several local streets and avenues, listed below. Per the *El Segundo Circulation Element*², the following list describes the designation of the major streets located within or directly adjacent to the Project Area:

- El Segundo Boulevard – Secondary Arterial (east of Main Street), 4-Lane Collector (west of Main Street)
- Grand Avenue – Secondary Arterial
- Mariposa Avenue – 2-Lane Collector (east of Main Street), Local Street (west of Main Street)
- Main Street – Secondary Arterial (south of Grand Avenue), 4-Lane Collector (north of Grand Avenue)

The *City of El Segundo Circulation Element*, defines the following street classifications:

² City of El Segundo, *City of El Segundo General Plan Circulation Element*, September 2004



Major Arterials

- Major arterials function to connect traffic from collectors to the major freeway system as well as to provide access to adjacent land uses. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These facilities handle inter-city and intra-city vehicular trips in the magnitude of 40,000 to 75,000 vehicles per day (VPD). They should be planned for eight lanes of through traffic. In the majority of cases in El Segundo, curb parking will be prohibited during peak periods. Bicycle traffic would travel with vehicular flow or be separated by a path behind the curb. Raised medians can be used to separate opposing flows of vehicular traffic as necessary. Access points, (i.e., driveways and minor intersecting streets) should be minimized.
- Separate left-turn lanes at major signalized intersections would be mandatory with double left-turn lanes the rule rather than the exception. Separate right-turn lanes which also serve as bus loading areas would be considered at locations indicating high turn volumes. At some intersections up to three left turn and up to two right turn lanes may be provided, if needed, and if acquisition of additional right-of-way is practical.

Secondary Arterials

- Secondary arterials are similar to major arterials in function. They connect traffic from collectors to the major freeway system. They move large volumes of automobiles, trucks and buses, and link the principal elements within the City to other adjacent regions. These streets handle intra-city trips in the magnitude of 25,000 to 55,000 VPD and are not as continuous in length as major arterials. At least six through lanes should be provided to handle these needs along with single or double left-turn lanes (the latter preferably) at major signalized intersections. Curb parking would be prohibited during peak periods. Bicycle traffic would have to use paths behind the curb, separate bicycle lanes, or travel in the street with autos, trucks and buses.

Collector Streets

- The collector street is intended to serve as an intermediate route to handle traffic between local streets and arterials. In addition, collector streets provide access to abutting property. Collector streets are anticipated to carry traffic volumes between 15,000 to 40,000 VPD and serve important internal functions within the community. A collector street may have one through lane per direction; but more realistically, it should have a minimum of two through lanes (at least during peak periods). In some cases, a 4-lane collector may have a median divider. Curb parking can be accommodated if abutting property owners have insufficient off-street parking. The function of the collector, however, is to "collect" vehicles from the local street system and transport them to the arterial system as efficiently as possible.
- Signalization of collector/local street intersections should be timed to permit the majority of the traffic flow on the collector while allowing local street access. Restriction of free flow along collectors due to unwarranted stop controls should be discouraged.



Local Streets

- Local streets principally provide vehicular, pedestrian, and bicycle access to property abutting the public right-of-way. Cross sections of local streets vary, depending on the abutting land uses, parking requirements, street trees, and other considerations. Where both sides of the street are served equally in residential areas, the common right-of-way width for a local street is 60 feet with a 36-foot pavement width.
- In multi-family areas where there is continuous parking throughout the day, a minimum of 40 feet of pavement may be required to provide room for two moving lanes of traffic in addition to street parking on both sides. In commercial and industrial areas, a minimum pavement width of 40 feet is considered necessary. In industrial areas, consideration of the predominant type of trucking, and whether or not maneuvering of trailers must be provided, may require a pavement width of more than 44 feet.
- When pavement widths exceed 40 feet on local streets, rights-of-way should be increased above 60 feet. Each parkway width should be 12 feet, including landscaped area and sidewalk. Sidewalk width should be 4 feet in residential areas and 5 feet in commercial or industrial areas.
- The overall system design of local streets can greatly affect traffic. Unduly long streets build up traffic volumes and act as collectors. Cross streets and intersections with acute angles are likely to contribute to accidents. Good practice precludes carrying local streets into arterials since such intersections create unnecessary friction points and cause related congestion on the arterials. A far better approach is to bring local streets into collectors which then feed into arterials.

Described below are the primary freeway and roadways that provide regional and local access to the Project Area.

Freeways

- **I-105 (Glenn Anderson Freeway)** is oriented in the east-west direction located north of the Project. Near the Project Area, I-105 provides three lanes in each direction. I-105 terminates onto Imperial Highway, providing access to the Project Area.
- **I-405 (San Diego Freeway)** is a north-south freeway located east of the Project. Located about 2.5 miles from the Project Area, I-405 provides five to six lanes in each direction. Access to the Project Area is provided via on and off-ramps to El Segundo Boulevard.

East – West Streets

Roadways located within or adjacent to the Project Area:

- **El Segundo Boulevard** is designated as a Secondary Arterial (east of Main Street) and a 4-Lane Collector (west of Main Street) and defines a portion of the southern boundary of the Project Area. El Segundo Boulevard provides two travel lanes in each direction. Approximately 2.5 miles east of the Project Area, El Segundo Boulevard provides access to and from I-405.



- **Grand Avenue** is designated as a Secondary Arterial and bisects the Project Area east-west. Grand Avenue provides access to Vista Del Mar, west of the Project Area. Grand Avenue includes two travel lanes in each direction with parking permitted on both sides of the street and both sides of the median. Grand Avenue is also a “sharrowed” (shared vehicle-bicycle lane marking) bicycle route. Grand Avenue is a dedicated truck route, and the speed limit is 25 mph.
- **Mariposa Avenue** is designated as a 2-Lane Collector (east of Main Street) and a Local Street (west of Main Street) and forms portions of the northern boundary of the Project Area. Mariposa Avenue provides one travel lane in each direction, with parking on some segments.

Roadways that provide local and regional access to the Project Area:

- **Imperial Highway** is designated as a Secondary Arterial oriented east-west, located approximately 0.9 miles north of the Project Area. Imperial Highway provides two travel lanes in each direction and features Class II bicycle lanes. Northeast of the Project Area, Imperial Highway provides access to and from I-105.

North – South Streets

Roadways located within or adjacent to the Project Area:

- **Main Street** is designated as a Secondary Arterial (south of Grand Avenue) and a 4-Lane Collector (north of Grand Avenue) and serves as the primary north-south thoroughfare through the Project Area. Main Street is the center of commercial activity in the Project Area. Main Street provides two travel lanes in each direction and is a “sharrowed” bicycle route. Main Street provides access to and from Imperial Highway to the north and El Segundo Boulevard to the south. The speed limit on Main Street is 25 miles per hour (mph). South of Grand Avenue, Main Street is a truck route, as defined in the General Plan Circulation Element, which is noted by signage.
 - South of Holly Avenue, Main Street can accommodate in-road bollards for temporary street closures. Bollards can be mounted in the permanent in-road receptacles to temporarily close approximately 340 feet of Main Street for special events, such as the farmer’s market.

Roadways that provide local and regional access to the Project Area:

- **CA-1 (Pacific Coast Highway, PCH, Sepulveda Boulevard)** is designated as a Major Arterial and is located approximately one mile east of the Project Area. PCH provides four travel lanes in each direction and serves as access to I-105, LAX, and neighboring cities to the south of El Segundo.
- **Vista Del Mar** is designated as a Secondary Arterial, located approximately two-thirds of a mile west of the Project Area. Vista Del Mar provides two travel lanes in each direction and serves as the major coastal thoroughfare through El Segundo. From the Project Area directly, access to Vista Del Mar is only provided via Grand Avenue.



2.3 Existing Public Transit Service

The Project Area is served by Beach Cities Transit and City of El Segundo Transportation. Below is a list of the bus routes that provide service to and within the Project Area:

Beach Cities Transit Line 109

- Line 109 connects LAX and Torrance via El Segundo, Manhattan Beach, Hermosa Beach, and Redondo Beach. In Downtown El Segundo, this line utilizes along Main Street and Grand Avenue. This line has headways of 40-50 minutes during weekdays.

Lunchtime Shuttle

- Lunchtime Shuttle services were suspended during the COVID-19 pandemic and had not resumed as of Winter 2023. Previously, the City of El Segundo Transportation Lunchtime Shuttle operated on a continuous loop between Downtown El Segundo and the Smoky Hollow area to the east from 11:45 to 2pm on weekdays.

Beach Shuttle

- Following suspended service during the COVID-19 pandemic, the City partnered with Swoop, Inc. to resume Beach Shuttle service for the 2022 summer season. The Beach Shuttle operates between El Segundo and El Porto Beach during the El Segundo Unified School District summer break. There are several stops located near the Project Area.

Dial-a-Ride

- The City currently operates Dial-a-Ride service in partnership with Lyft. This service primarily focuses on enhancing accessibility for seniors and disabled residents. The service operates on weekdays and serves the entirety of the Project Area.



2.4 Existing Bicycle and Pedestrian Facilities

Main Street and Grand Avenue currently provide bicycle facilities in the Project Area. These roadways are designated as Class III bicycle routes with on-pavement shared lane markings, also known as “sharrows”, for their full extents within the Project Area.

Currently, pedestrian facilities are provided throughout the Project Area, including sidewalks on all streets, and marked crosswalks at both intersections and at some midblock locations. There are four midblock crosswalks, all located on Main Street, which feature pedestrian-activated in-road flashing lights, crosswalk signs, and yield paddles.

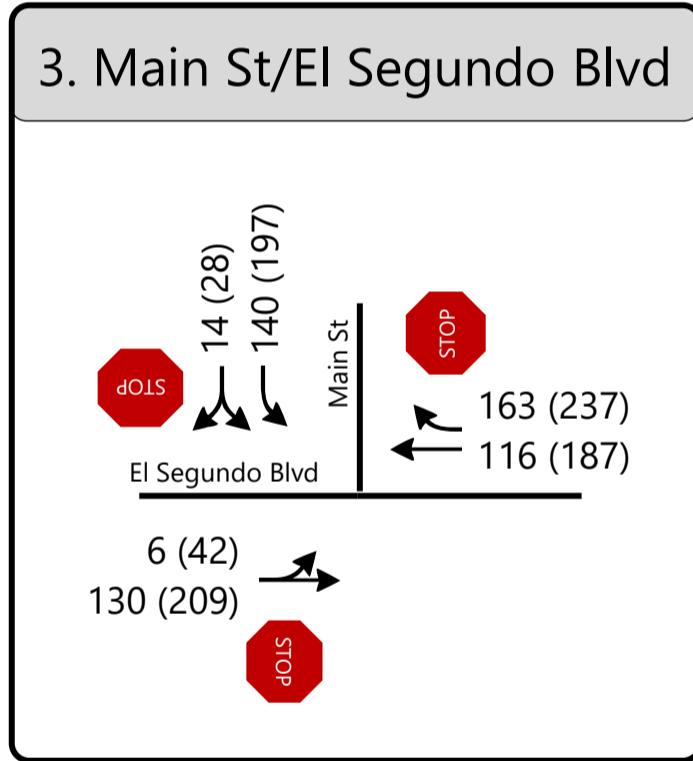
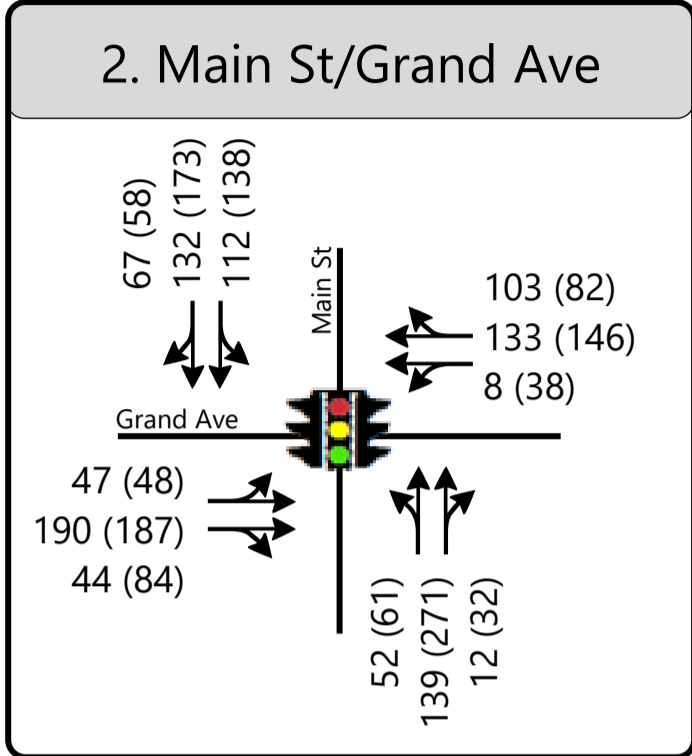
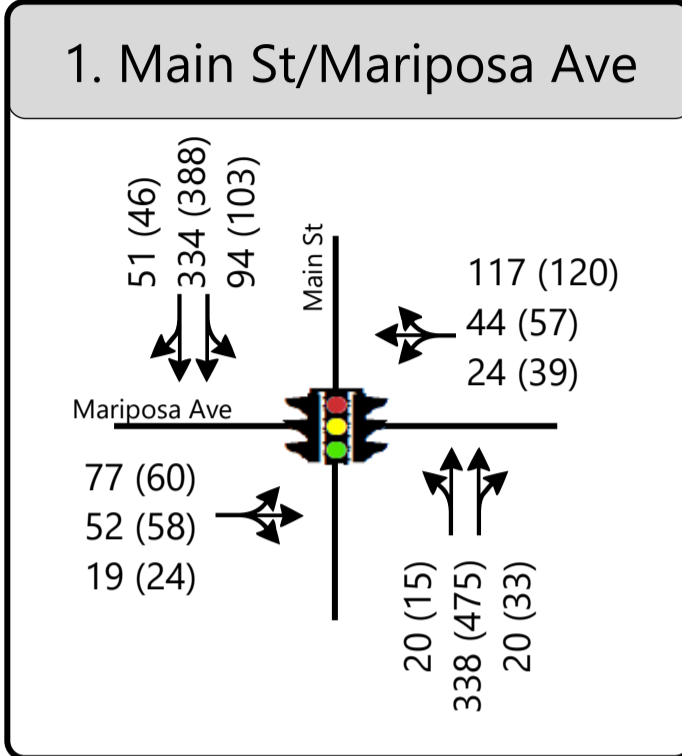
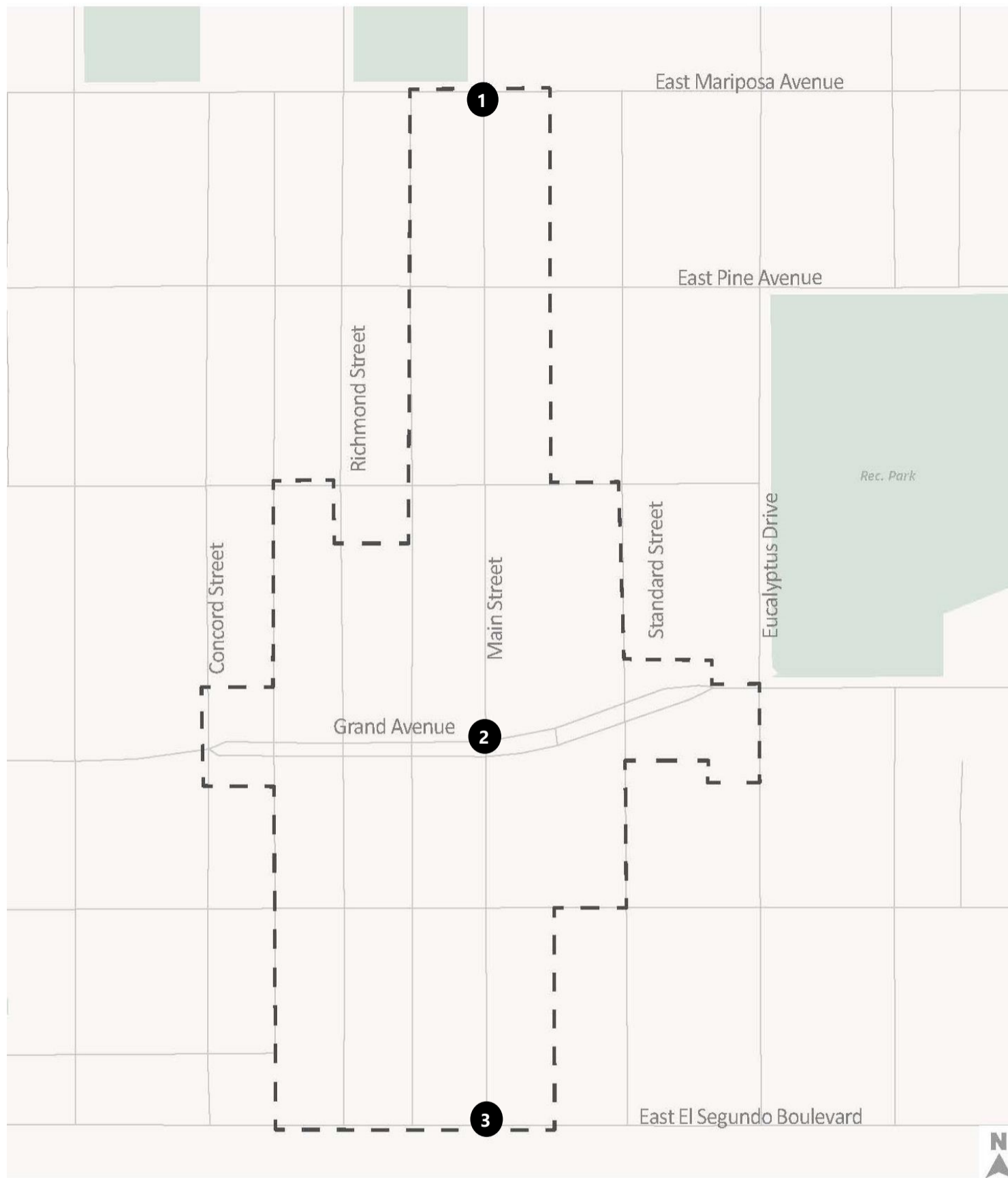
2.5 Existing Traffic Volume and Level of Service

This section includes the existing peak hour traffic volumes, a description of the methodology used to assess the traffic conditions at each intersection, and the existing peak hour LOS at the study intersections.

2.5.1 Existing Volume and Lane Configuration

Turning movement counts were conducted at the three study intersections between 7:00am and 10:00am and from 4:00pm to 7:00pm on Tuesday, May 24th, 2022. From these six-hour counts, an AM and PM peak hour was determined for each study intersection, and the counts from those hours were used for the LOS analysis. Traffic count worksheets for these intersections are contained in **Appendix A**. A field visit was also performed on July 8th, 2022, at which signal operations, lane geometry, and other factors that impact vehicular operations were observed and recorded.





LEGEND

- # Study Intersection
- AM (PM) Peak Hour Traffic Volume
- ↔ Lane Configuration
- STOP Stop Sign
- 🚦 Signalized

Figure 2-1
Traffic Volume and Lane Configuration
Existing (2022)



2.5.2 Level of Service Methodology

This LTA was conducted based on methodology described in the City of El Segundo General Plan Circulation Element. Per the Circulation Element, LOS calculations were performed using the Intersection Capacity Utilization (ICU) methodology for signalized intersections and the Highway Capacity Manual (HCM) 6th Edition for unsignalized intersections. ICU calculation spreadsheets and HCM 6th edition reports are included in **Appendix C** and **Appendix D**.

The City of El Segundo General Plan Circulation Element defines LOS according to **Table 2-1** for signalized intersections and **Table 2-2** for unsignalized intersections.

Table 2-1: Signalized Intersection Level of Service Definitions

Level of Service	Traffic Quality	Range of ICU
A	Low volume; high speeds; speed not restricted by other vehicles; all signal cycles clear with no vehicles waiting through more than one signal cycle.	0.00-0.60
B	Operating speed beginning to be affected by other traffic; between one and ten percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak hour traffic periods.	0.61-0.70
C	Operating speeds and maneuverability closely controlled by other traffic, between 11 and 30 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods; recommended ideal design standard.	0.71-0.80
D	Tolerable operating speeds; 31 to 70 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods; often used as design standard in urban areas.	0.81-0.90
E	Capacity, the maximum traffic volume an intersection can accommodate; restricted speeds; 71 to 100 percent of the signal cycles have one or more vehicles which wait through more than one signal cycle during peak traffic periods.	0.91-1.00
F	Long queues of traffic; unstable flow; stoppages of long duration; traffic volume and traffic speed can drop to zero; traffic volume will be less than the volume which occurs at Level of Service "E."	Over 1.00

Source: City of El Segundo General Plan Circulation Element



Table 2-2: Unsignalized Intersection Level of Service Definitions

Level of Service	Average Control Delay (s/veh)
A	0-10
B	>10-15
C	>15-25
D	>25-35
E	>35-50
F	>50

Source: City of El Segundo General Plan Circulation Element

2.5.3 Existing Level of Service

Existing year (2022) traffic volumes, presented in **Appendix A**, were analyzed using the methodologies described above to determine the existing operating conditions at the study intersections. **Table 2-3** summarizes the resulting V/C ratios for the ICU analysis and the seconds of delay per vehicle for the HCM analysis of existing weekday morning and evening peak hours and the corresponding LOS at each of the analyzed intersections. All three of the study intersections were found to perform at an acceptable LOS of either A or B. Detailed LOS analysis sheets for the Project are provided in **Appendix C** and **Appendix D**.

Table 2-3: Existing Intersection Operations

ID	Intersection	Control	Peak Hour	ICU ²	Average Delay (s) ³	LOS
1	Main St & Mariposa Ave	Signal	AM	0.441	N/A	A
			PM	0.500	N/A	A
2	Main St & Grand Ave	Signal	AM	0.338	N/A	A
			PM	0.424	N/A	A
3	Main St & El Segundo Blvd	AWSC	AM	N/A	9.0	A
			PM	N/A	11.4	B

Source: Fehr & Peers, 2022

¹V/C represents volume/capacity and is a component of ICU methodology for signalized intersections

² ICU represents the intersection capacity utilization of a signalized intersection

³Average delay is calculated using HCM 6th Edition methodology in the Synchro 11 software for unsignalized intersections

AWSC = All-way stop control



3. Future (2040) Projections and Roadway Enhancements

3.1 Project Trips

The development of trip generation estimates for the proposed Project involves the use of a 3-step process: trip generation, trip distribution, and trip assignment.

3.1.1 Project Trip Generation

As indicated in **Table 1-1**, the proposed Project will enable the buildout of net new residential, retail, restaurant, office, and medical office uses. The analysis in this LTA used the Mixed-Use Development (MXD) trip generation methodology. The MXD methodology was developed in partnership with the United States Environmental Protection Agency (EPA), to more accurately estimate the internalization of project trips associated with mixed use developments and districts, and the associated net external trip generation of mixed-use projects, which typically generate fewer vehicle trips than single use developments located in more isolated settings. The MXD methodology adjusts typical Institute of Transportation Engineers (ITE) trip rates to reflect the internalization and site-specific attributes of mixed-use developments.

3.1.2 Project Trip Distribution

The geographic distribution of trips generated by the proposed Project was determined based on regional distribution from the Southern California Association of Governments (SCAG) 2020 Regional Transportation Plan (RTP/SCS) Activity-Based Model (ABM). The ABM considers regional travel behavior, including socioeconomic data change through 2040 and future transportation projects.

3.1.3 Project Trip Assignment

The traffic expected to be generated by the proposed Project was assigned to the street network based on the distribution patterns from the ABM of Project Area circulation considerations, such as parking lot and structure locations. The distribution of project trips is illustrated in **Figure 3-1** and the resulting intersection turning movement volume of those trips is illustrated in **Figure 3-2**. **Figure 3-2** also shows the future intersection geometry discussed in **Section 3.3.1**.



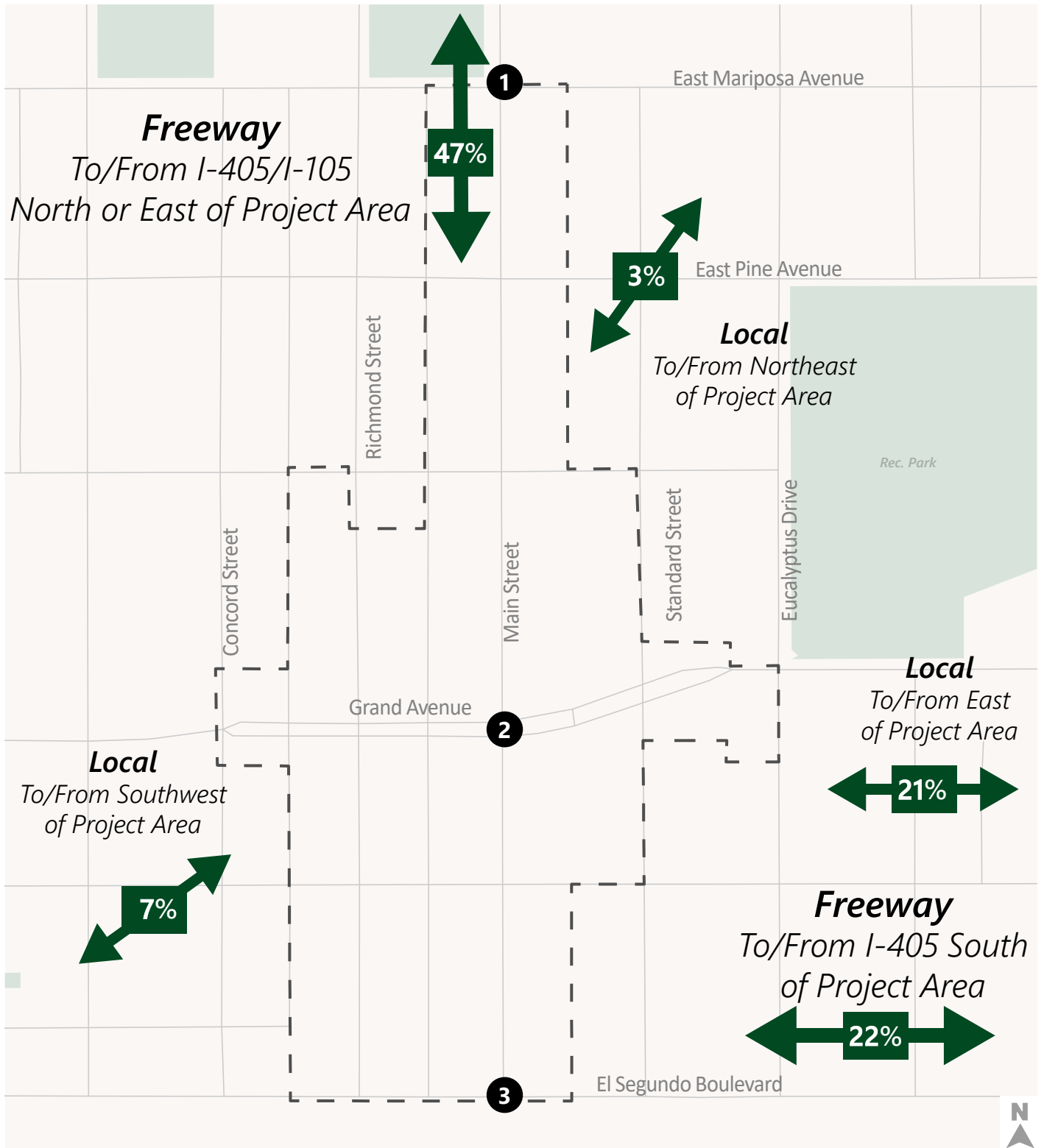


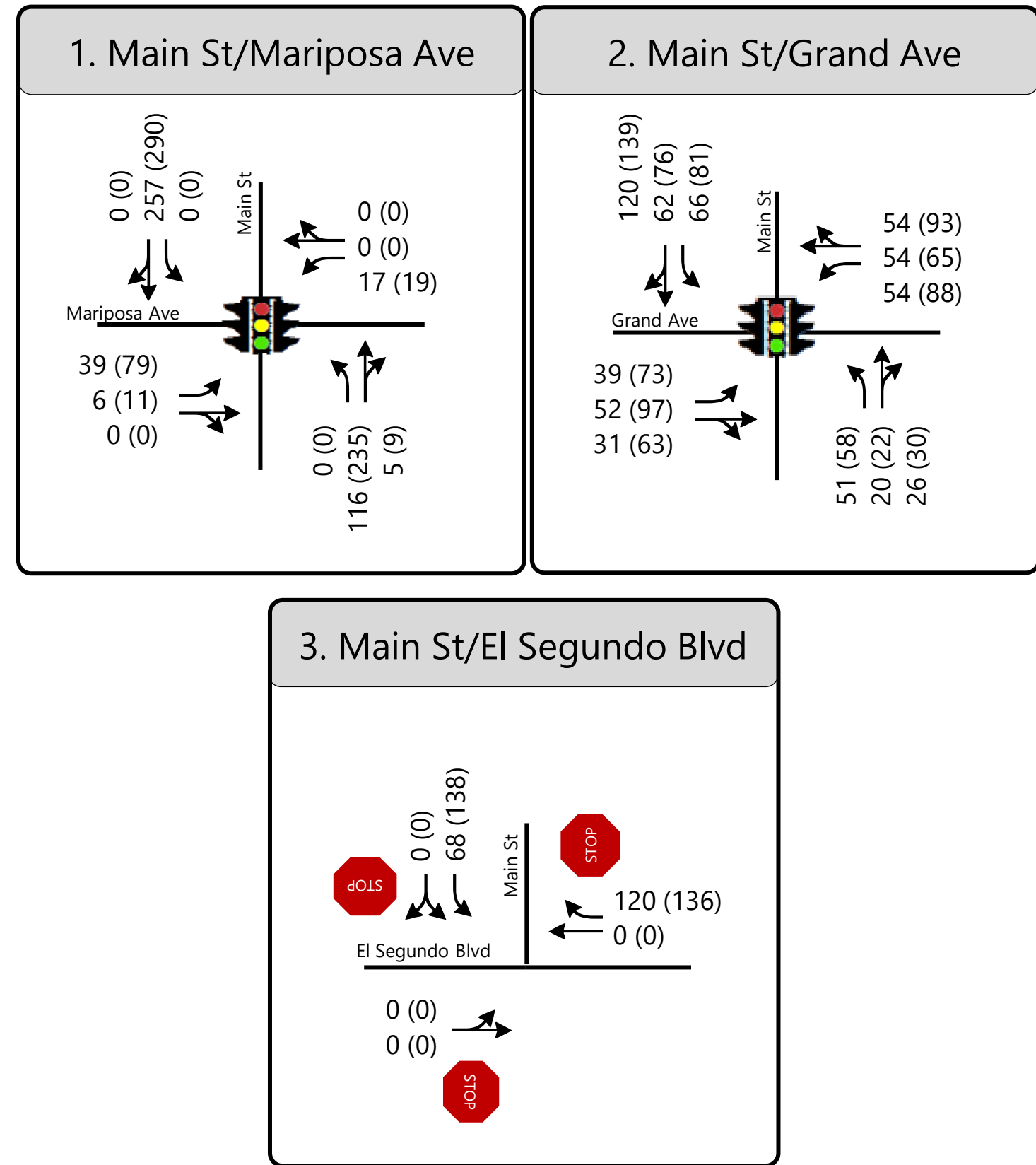
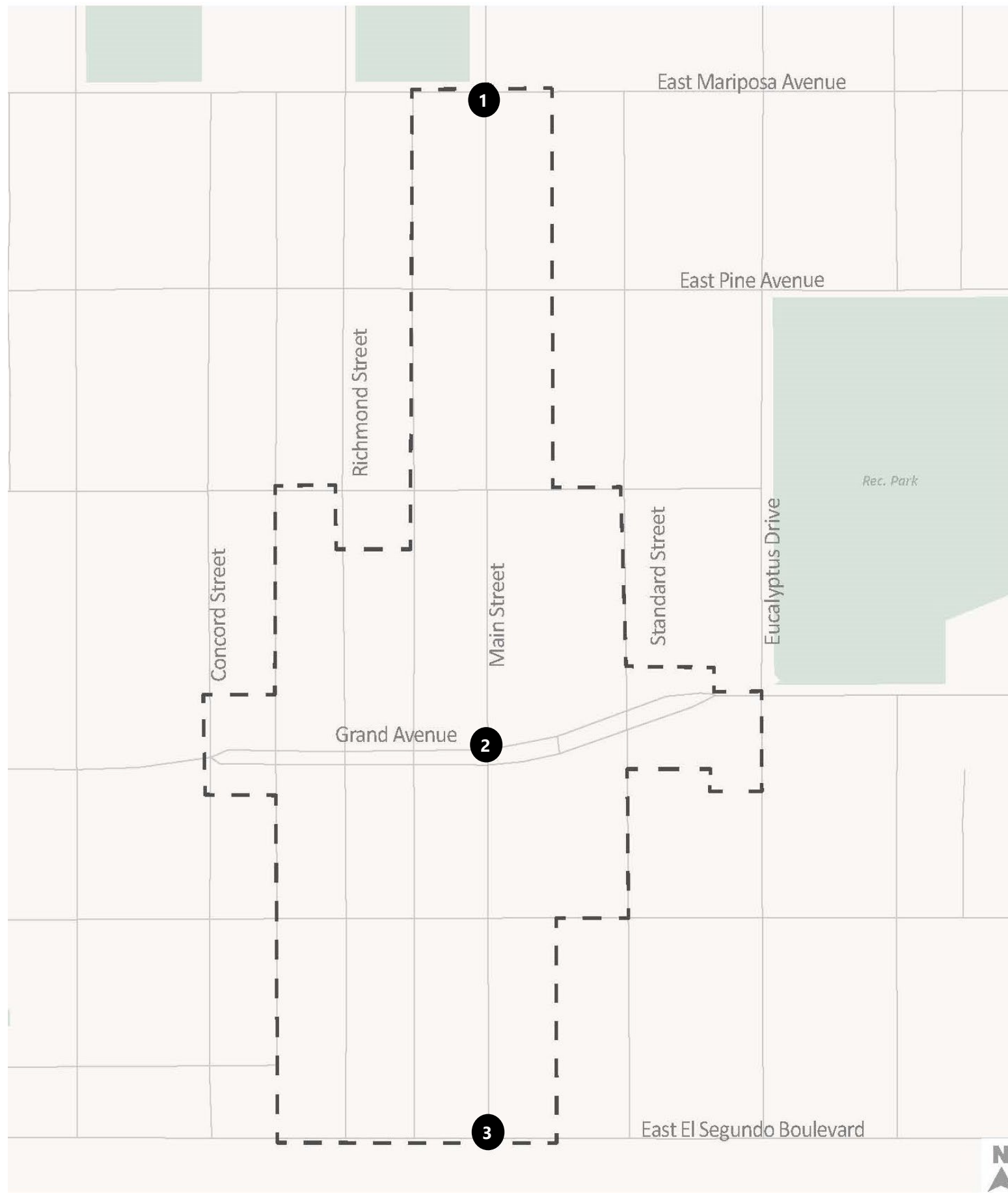
Figure 3-1



- # Study Intersections
- Parks
- DSP Boundary

% Distribution of Project Trips

Project Trip Distribution



LEGEND

- # Study Intersection
- AM (PM) Peak Hour Traffic Volume
- ↔ Lane Configuration
- STOP Stop Sign
- 🚦 Signalized



Figure 3-2
Traffic Volume and Lane Configuration
Project Only

3.2 Future (2040) Base Conditions

To evaluate the potential effects of the proposed Project on future (Year 2040) conditions, it was necessary to develop estimates of future conditions in the area both with and without Project trips. Future (Year 2040) Base weekday AM and PM peak hour traffic volumes for the study intersections are provided in **Appendix B**. The Future Base traffic conditions represent an estimate of future conditions without the proposed Project inclusive of the ambient background growth and related project traffic, as described in **Sections 3.2.1** and **3.2.2**.

3.2.1 Background or Ambient Growth

Future Base traffic volume was estimated for the Project Area by applying forecasted growth from the ABM to the existing traffic counts. These forecasts included a 0.41% ambient growth rate in the AM peak hour and a 0.19% rate in the PM peak hour. Future year scenarios of the ABM include travel trends, such as increased telecommuting and buildout of the Metro regional rail network, which oftentimes reflect minimal to zero ambient growth on many roadways. To provide the City with a conservative intersection operations analysis that accounts for future ambient traffic growth, and does not rely on a decrease in traffic due to telecommuting or rail transit, the growth from the nearest arterial with a positive traffic growth in the ABM, which was Pacific Coast Highway, was utilized.

3.2.2 Related Project

The Smoky Hollow Specific Plan³ Area is located to the east of the Project Area. As defined by the City of El Segundo, the Smoky Hollow Specific Plan provides a framework and long-term strategy to guide public and private investment in the Smoky Hollow area. As portions of the Smoky Hollow Specific Plan are in the same transportation analysis zones (TAZs) as the Project Area, the analysis in this LTA includes the employment growth projections defined within the Smoky Hollow Specific Plan. These employment growth projections were included as inputs for the ABM, thus, the trips associated with the Smoky Hollow Specific Plan Buildout are reflected in the cumulative growth described in **Section 3.2.1**. Adjacent neighborhoods to the north and west of the Project Area are primarily residential in nature, consisting mostly of single-family homes. As suggested by the Southern California Association of Governments (SCAG) 2020 Connect SoCal (RTP/SCS) growth forecast, no substantial change in population or employment is expected to occur in those primarily residential areas through 2040.

Including both ambient growth and Smoky Hollow Specific Plan trips provides a conservative estimate of future traffic projections. These projected traffic volumes, identified herein as the Future Base conditions, represent the future conditions without the proposed Project.

³ *Smoky Hollow Specific Plan, City of El Segundo, 2018.*



3.3 Future (2040) Plus Project Conditions

The proposed Project trips were added to the Future (2040) Base traffic projections, resulting in Future (2040) plus Project AM and PM peak hour traffic volumes. The Future plus Project scenarios present future traffic conditions with the buildout enabled by the Project. **Appendix B** shows the volumes analyzed as part of the Future plus Project scenario.

3.3.1 Future (2040) Project Mobility Enhancements

The Project proposes the roadway cross sections for Main Street and Grand Avenue as described in **Table 3-1**. The preferred roadway cross sections include a Class III shared bicycle route with “sharrows” on Grand Avenue, which currently exists on the corridor, and a Class II bicycle lane on Main Street.

Table 3-1: Project Preferred Road Sections

Road	Approximate Extents	Existing Typical Section ¹	Preferred Typical Section ¹
Main Street	El Segundo Blvd to Mariposa Ave	12' sidewalks (both sides) 8' parallel parking (both sides) Four 10' travel lanes (two each direction) with “sharrows”	15' outdoor dining/sidewalks (both sides) 8' parallel parking (both sides) 6' bicycle lane (one each direction) Two 11' travel lanes (one each direction)
Grand Avenue	Standard St to Concord St	10' sidewalks (both sides) 8' parallel parking (both sides of street and median) Four 11' travel lanes (two each direction) with “sharrows” 4' median	18' outdoor dining/sidewalks (both sides) 16' angled parking (back-in, both sides) Two 12' travel lanes (one each direction) with “sharrows” 8' median

Source: Fehr & Peers and RRM Design Group, 2023

¹Dimensions are approximate. Exact dimensions to be determined during engineering design

The roadway sections described in **Table 3-1** describe typical configuration along the road’s extents within the Project Area. At study intersection approaches, these sections would be modified to incorporate turn pockets and receiving lanes necessary for efficient intersection operation. Additionally, in the DSP, protected left turn phases at the two signalized intersections are recommended, which requires left turn pockets.

This LTA includes intersection LOS analysis, which is based on geometry at intersection approaches, not typical sections. While final engineering design should be based on further study prior to intersection improvement implementation, this LTA considers the following lane configuration and signal phasing at study intersection approaches. Future lane configurations are also described in **Figure 3-3**:

1. Main Street & Mariposa Avenue
 - One left turn lane and one shared through-right turn lane on each approach



- Protected left turn phase on each approach
2. Main Street & Grand Avenue
 - One left turn lane and one shared through-right turn lane on each approach
 - Protected left turn phase on each approach
 3. Main Street & El Segundo Boulevard
 - Same as existing



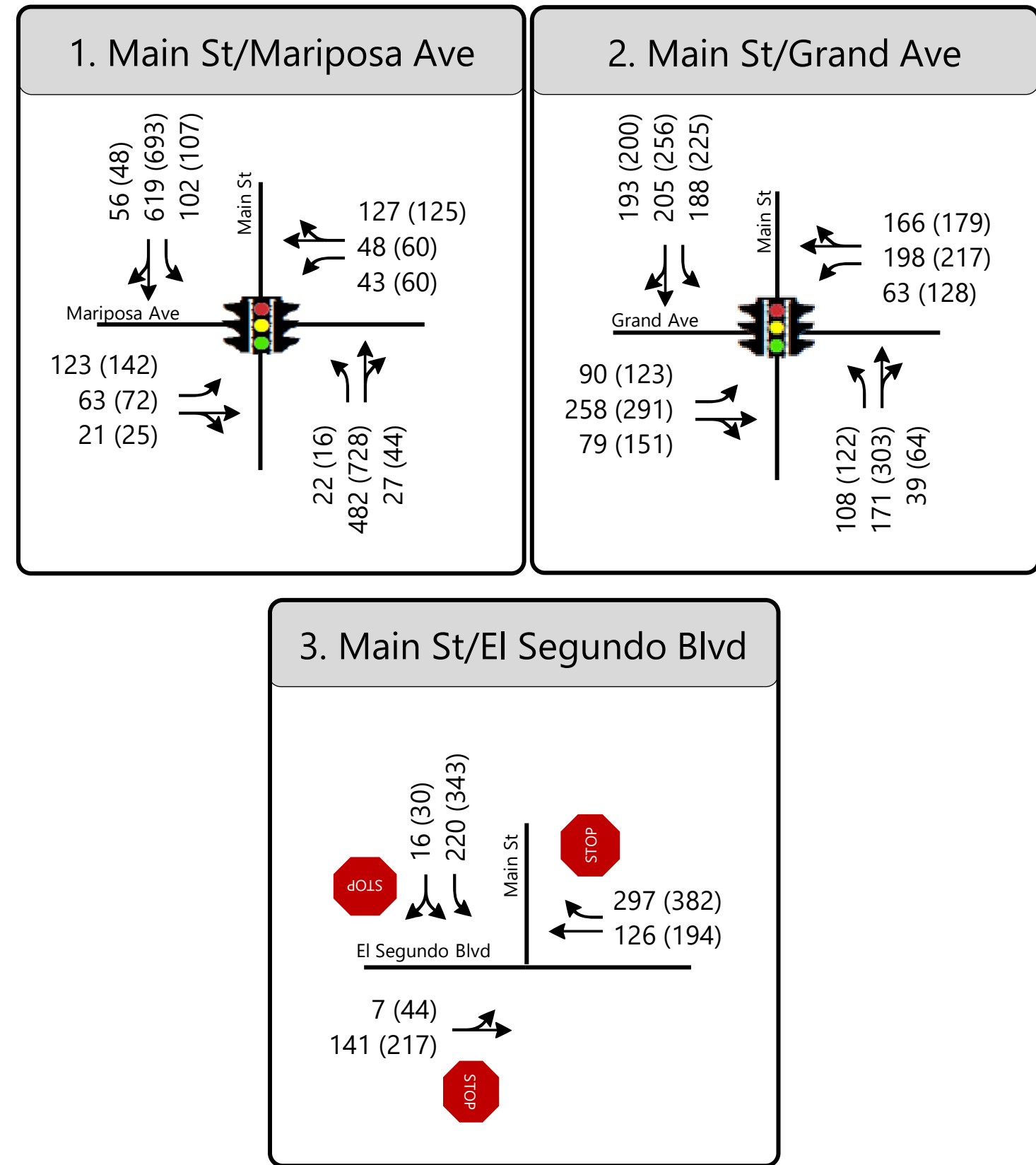
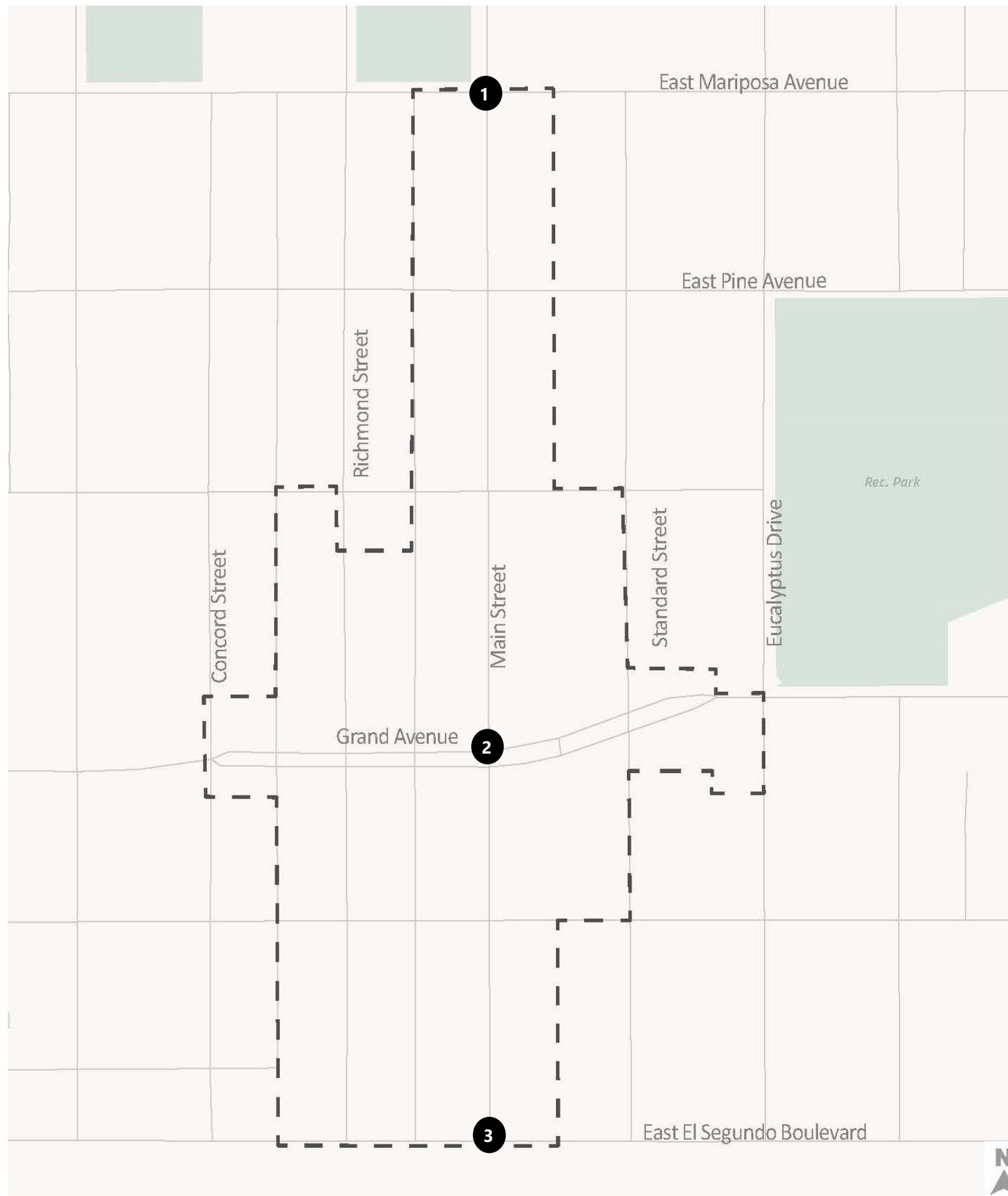


Figure 3-3
Traffic Volume and Lane Configuration
Future with Project (2040)



LEGEND

- # Study Intersection
- AM (PM) Peak Hour Traffic Volume
- ↖ ↗ Lane Configuration
- STOP Stop Sign
- Signalized

4. Intersection Traffic Analysis

The intersection traffic analysis evaluates the projected LOS at each study intersection under the Future (2040) and Future (2040) plus Project conditions to estimate the incremental increase in the V/C ratio or seconds of delay per vehicle expected to be caused by the proposed Project.

4.1 Future Plus Project Analysis

4.1.1 Future Base Level of Service

The year Future Base peak hour traffic volume was analyzed to determine the projected V/C ratio or delay in seconds per vehicle and LOS for each of the analyzed intersections. **Table 4-1** summarizes the Existing, Future, and Future with Project V/C ratio, ICU, vehicle delay, and LOS. All three study intersections are expected to continue to operate at an acceptable LOS of A or B during both AM and PM peak hours. Detailed LOS calculation sheets are provided in **Appendix C** and **Appendix D**.

4.1.2 Future Plus Project Level of Service

The resulting Future plus Project peak hour traffic volumes, provided in **Appendix B**, were analyzed to determine the projected future operating conditions with the addition of the proposed Project trips. The results of the Future plus Project analysis are also presented in **Table 4-1**, and the ICU and HCM calculation sheets are provided in **Appendix C** and **Appendix D**.

During the AM peak hour, both signalized intersections, Main Street and Mariposa Avenue (Int. 1) and Main Street and Grand Avenue (Int. 2), are expected to operate at LOS C. The unsignalized intersection of Main Street and El Segundo Boulevard (Int. 3) is expected to operate at LOS B.

During the PM peak hour, both signalized intersections, Main Street and Mariposa Avenue (Int. 1) and Main Street and Grand Avenue (Int. 2), are expected to operate at LOS D. The unsignalized intersection of Main Street and El Segundo Boulevard (Int. 3) is expected to operate at LOS C.



**Table 4-1
El Segundo Downtown Specific Plan Update
Intersection Level of Service**

ID	Intersection	Control	Peak Hour	Existing ¹		Future Base (2040) ¹		Future (2040) with Project ¹		ICU or Delay Change (s) Existing to Future with Project	ICU or Delay Change (s) Future Base to Future with Project
				ICU or Delay (s) ²	LOS ³	ICU or Delay (s) ²	LOS ³	ICU or Delay (s) ²	LOS ³		
1	Main St & Mariposa Ave	Signalized	AM	0.441	A	0.471	A	0.722	C	0.281	0.251
			PM	0.500	A	0.517	A	0.855	D	0.355	0.338
2	Main St & Grand Ave	Signalized	AM	0.338	A	0.360	A	0.701	C	0.363	0.341
			PM	0.424	A	0.437	A	0.826	D	0.402	0.389
3	Main St & El Segundo Blvd	AWSC	AM	9.0	A	9.3	A	10.6	B	1.6	1.3
			PM	11.4	B	11.8	B	15.8	C	4.4	4.0

Source: Fehr & Peers, 2023

AWSC = All Way Stop Controlled

¹Signalized intersections are analyzed with Intersection Capacity Utilization (ICU) methodology. Unsignalized intersections are analyzed with Highway Capacity Manual (HCM) 6th edition methodology.

²ICU value is reported for signalized intersections. Delay represents the average delay per vehicles per HCM 6th Edition calculations. HCM methodology was performed, and seconds of delay is listed for the unsignalized intersection

³LOS definitions are based on the City of El Segundo Circulation Element

5. Conclusion

5.1.1 Results

The Circulation Element⁴ Policy C3-1.2 defines that *“The minimum acceptable level of service (LOS) at an intersection is LOS D. Intersections operating at LOS E or F shall be considered deficient. If traffic caused by a development project is forecast to result in an intersection level of service change from LOS D or better to LOS E or F, then the development impact shall be considered significant. If a development project is forecast to result in the increase of intersection volume/capacity ratio (V/C) of 0.02 or greater at any intersection that is forecast to operate at LOS E or F, the impact shall be considered significant.”*

Based on Policy C3-1.2, all three study intersections would continue operating at an acceptable LOS of A, B, C, or D during both the AM and PM peak hours under the Cumulative with Project scenario. It should be noted that “significant” in the context of the Circulation Element should not be considered significant under the California Environmental Quality Act (CEQA), as Senate Bill 743 removed level of service as a metric to evaluate significant transportation impacts under CEQA.

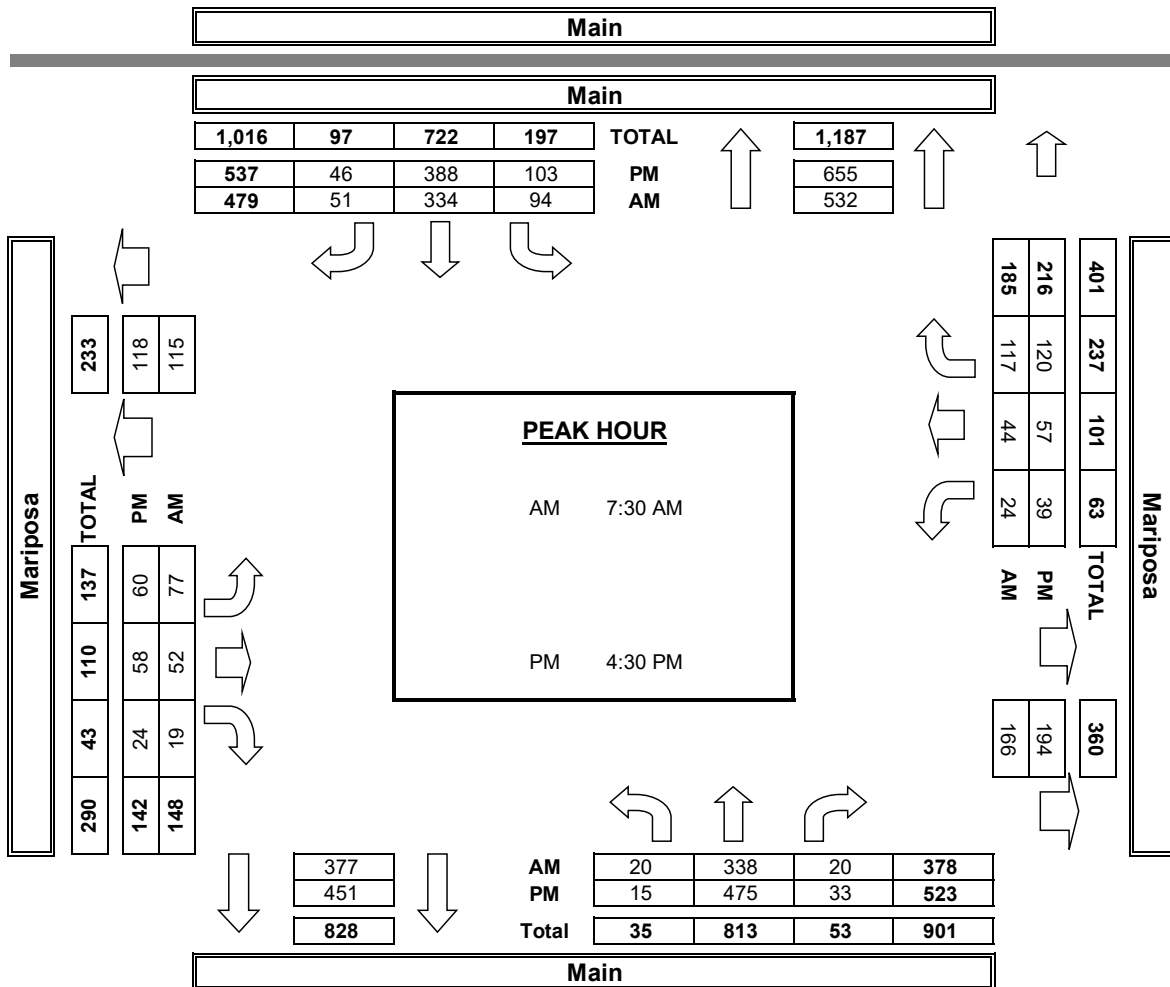
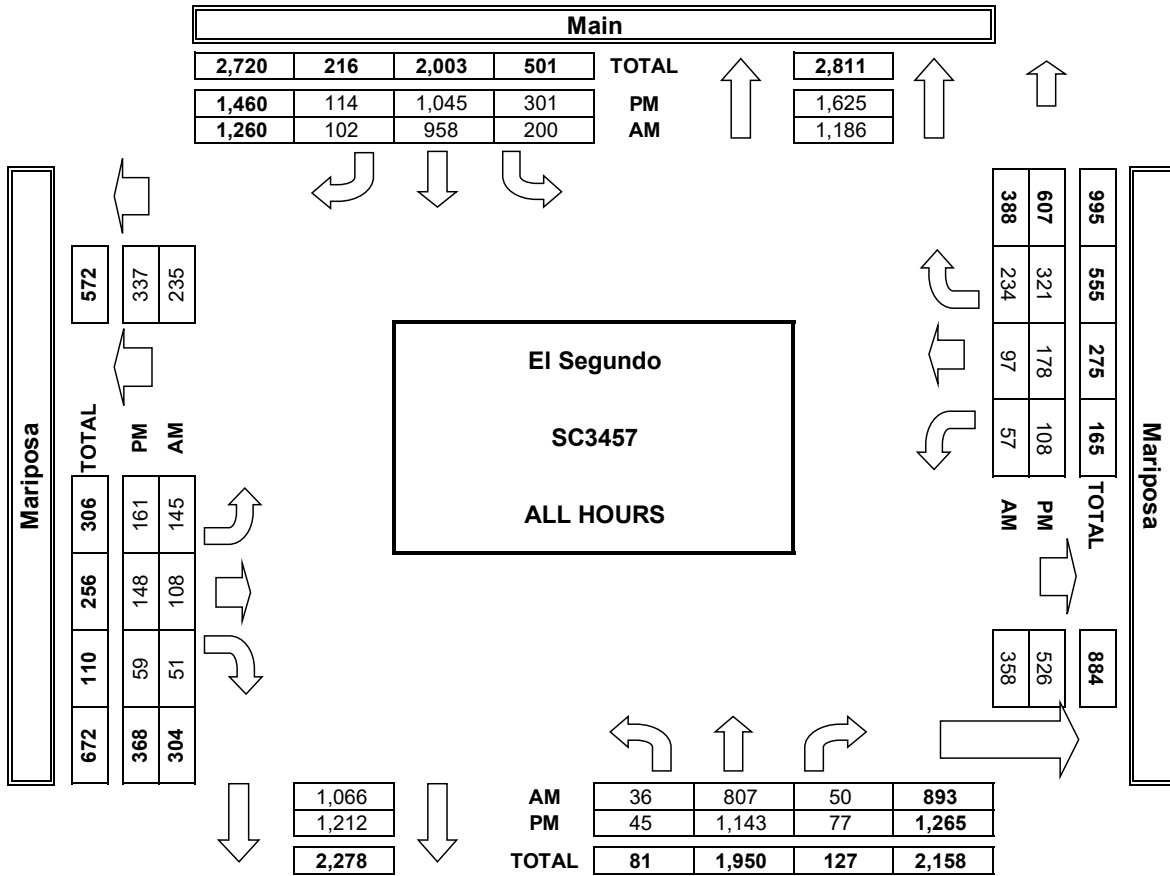
⁴ City of El Segundo, *City of El Segundo General Plan Circulation Element*, September 2004



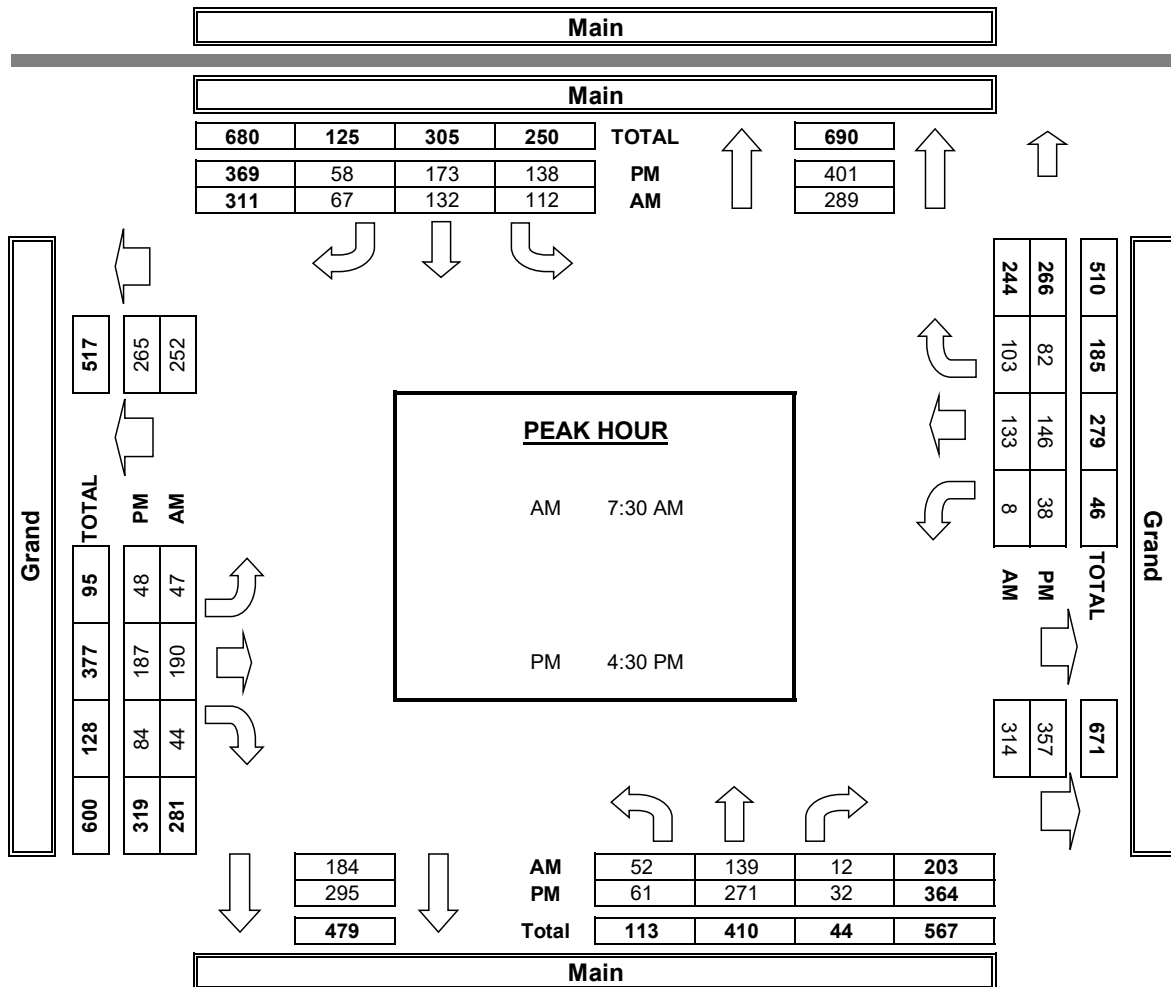
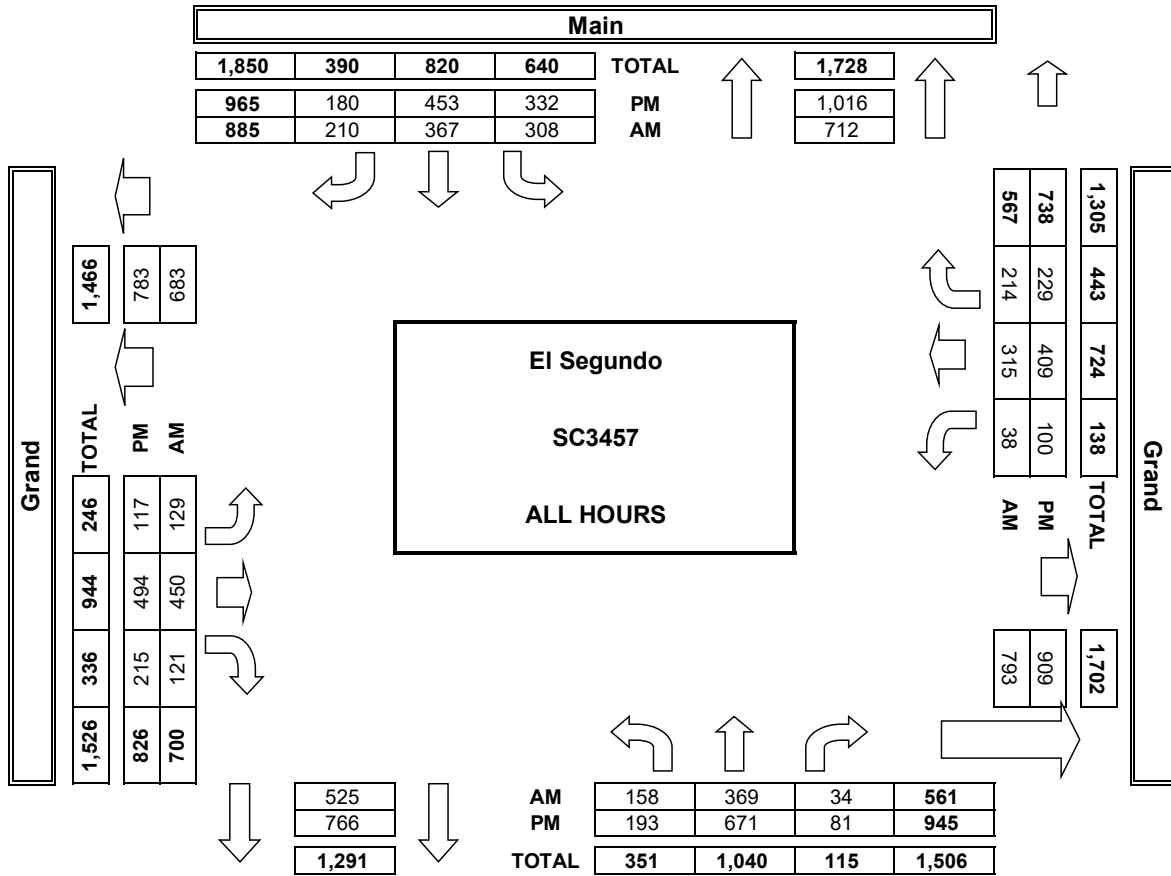
Appendix A – Study Intersections Existing Volume (Counts)



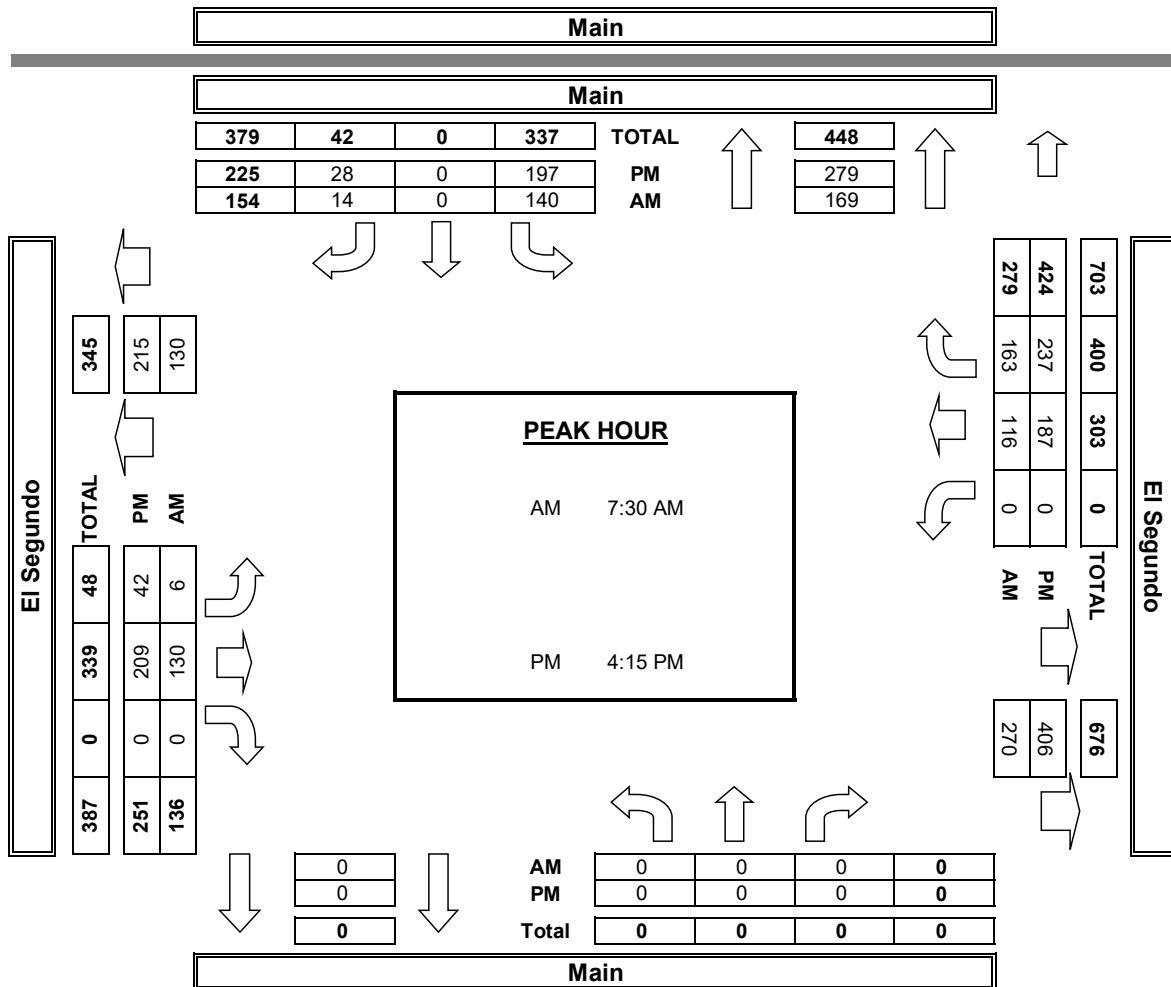
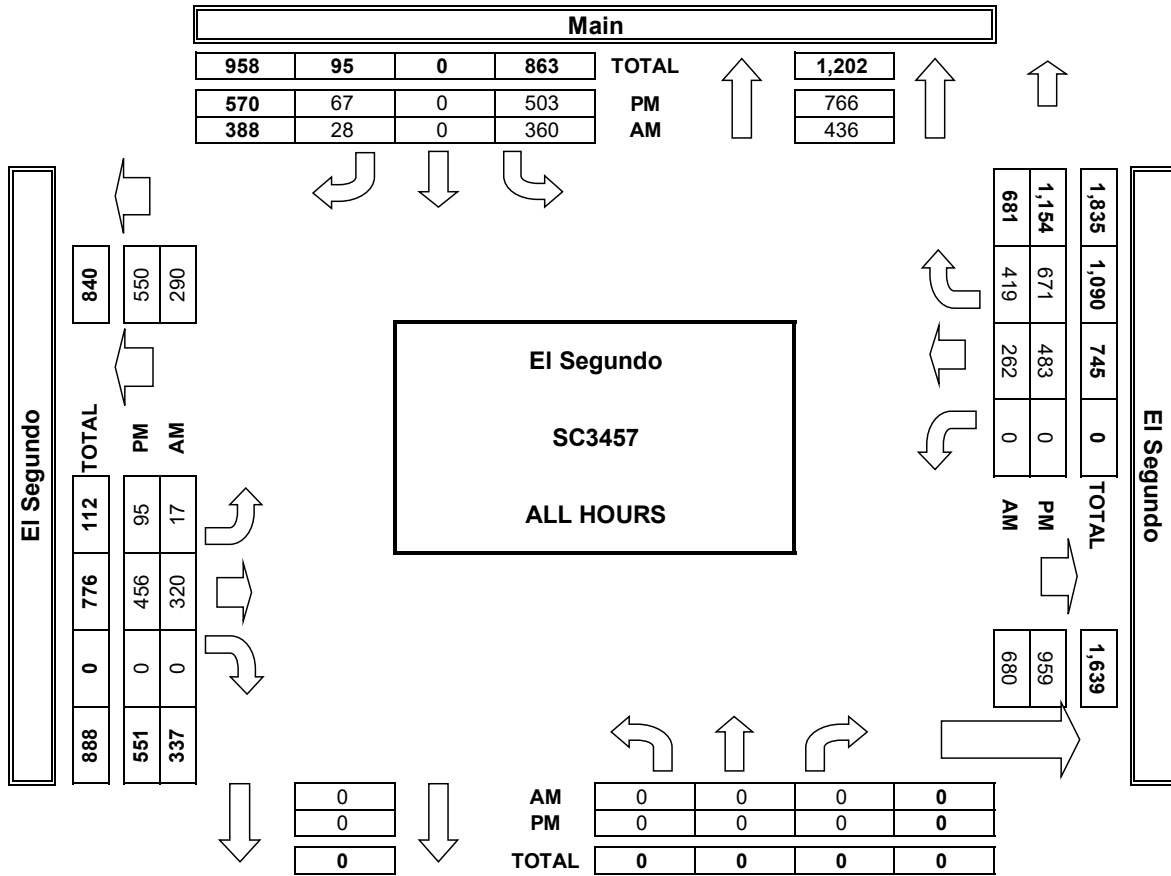
AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



AimTD LLC
TURNING MOVEMENT COUNTS



Appendix B – Study Intersections Future Volume



Appendix B - Study Intersections Future Volume

Future (2040) Base Volume

INTID	E/ W St	N/S St	AM Peak Hour												PM Peak Hour											
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mariposa Ave	Main St	22	366	22	102	362	56	84	57	21	26	48	127	16	493	35	107	403	48	63	61	25	41	60	125
2	Grand Ave	Main St	57	151	13	122	143	73	51	206	48	9	144	112	64	281	34	144	180	61	50	194	88	40	152	86
3	El Segundo Blvd	Main St	0	0	0	152	0	16	7	141	0	0	126	177	0	0	0	205	0	30	44	217	0	0	194	246

Project-Only Volume

INTID	E/ W St	N/S St	AM Peak Hour												PM Peak Hour											
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mariposa Ave	Main St	0	116	5	0	257	0	39	6	0	17	0	0	0	235	9	0	290	0	79	11	0	19	0	0
2	Grand Ave	Main St	51	20	26	66	62	120	39	52	31	54	54	54	58	22	30	81	76	139	73	97	63	88	65	93
3	El Segundo Blvd	Main St	0	0	0	68	0	0	0	0	0	0	0	120	0	0	0	138	0	0	0	0	0	0	0	136

Future (2040) with Project Volume

INTID	E/ W St	N/S St	AM Peak Hour												PM Peak Hour											
			NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	EBL	EBT	EBR	WBL	WBT	WBR
1	Mariposa Ave	Main St	22	482	27	102	619	56	123	63	21	43	48	127	16	728	44	107	693	48	142	72	25	60	60	125
2	Grand Ave	Main St	108	171	39	188	205	193	90	258	79	63	198	166	122	303	64	225	256	200	123	291	151	128	217	179
3	El Segundo Blvd	Main St	0	0	0	220	0	16	7	141	0	0	126	297	0	0	0	343	0	30	44	217	0	0	194	382

Appendix C – ICU Calculations



Project Title: El Segundo DSP
Intersection: 1 - Main St & Mariposa Ave
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	51	0	0.000	N-S(1): 0.177 *
	TH	2.00	334	1,600	0.150	N-S(2): 0.163
	LT	0.00	94	1,600	0.059 *	E-W(1): 0.108
Westbound	RT	0.00	117	0	0.000	E-W(2): 0.164 *
	TH	1.00	44	1,600	0.116 *	V/C: 0.341
	LT	0.00	24	1,600	0.015	Lost Time: 0.100
Northbound	RT	0.00	20	0	0.000	ITS: 0.000
	TH	2.00	338	1,600	0.118 *	ICU: 0.441
	LT	0.00	20	1,600	0.013	LOS: A
Eastbound	RT	0.00	19	0	0.000	
	TH	1.00	52	1,600	0.093	
	LT	0.00	77	1,600	0.048 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	46	0	0.000	N-S(1): 0.227 *
	TH	2.00	388	1,600	0.168	N-S(2): 0.177
	LT	0.00	103	1,600	0.064 *	E-W(1): 0.113
Westbound	RT	0.00	120	0	0.000	E-W(2): 0.173 *
	TH	1.00	57	1,600	0.135 *	V/C: 0.400
	LT	0.00	39	1,600	0.024	Lost Time: 0.100
Northbound	RT	0.00	33	0	0.000	ITS: 0.000
	TH	2.00	475	1,600	0.163 *	ICU: 0.500
	LT	0.00	15	1,600	0.009	LOS: A
Eastbound	RT	0.00	24	0	0.000	
	TH	1.00	58	1,600	0.089	
	LT	0.00	60	1,600	0.038 *	

* - Denotes critical movement

Project Title: EI Segundo DSP
Intersection: 2 - Main St & Grand Ave
Description: Existing

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	67	0	0.000	N-S(1):	0.133 *
	TH	2.00	132	1,600	0.097	N-S(2):	0.130
	LT	0.00	112	1,600	0.070 *	E-W(1):	0.093
Westbound	RT	0.00	103	0	0.000	E-W(2):	0.105 *
	TH	2.00	133	1,600	0.076 *	V/C:	0.238
	LT	0.00	8	1,600	0.005	Lost Time:	0.100
Northbound	RT	0.00	12	0	0.000	ITS:	0.000
	TH	2.00	139	1,600	0.063 *	ICU:	0.338
	LT	0.00	52	1,600	0.033	LOS:	A
Eastbound	RT	0.00	44	0	0.000		
	TH	2.00	190	1,600	0.088		
	LT	0.00	47	1,600	0.029 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.00	58	0	0.000	N-S(1):	0.200 *
	TH	2.00	173	1,600	0.115	N-S(2):	0.153
	LT	0.00	138	1,600	0.086 *	E-W(1):	0.124 *
Westbound	RT	0.00	82	0	0.000	E-W(2):	0.113
	TH	2.00	146	1,600	0.083	V/C:	0.324
	LT	0.00	38	1,600	0.024 *	Lost Time:	0.100
Northbound	RT	0.00	32	0	0.000	ITS:	0.000
	TH	2.00	271	1,600	0.114 *	ICU:	0.424
	LT	0.00	61	1,600	0.038	LOS:	A
Eastbound	RT	0.00	84	0	0.000		
	TH	2.00	187	1,600	0.100 *		
	LT	0.00	48	1,600	0.030		

* - Denotes critical movement

Project Title: El Segundo DSP
Intersection: 1 - Main St & Mariposa Ave
Description: Future Base

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	56	0	0.000	N-S(1): 0.192 *
	TH	2.00	362	1,600	0.163	N-S(2): 0.177
	LT	0.00	102	1,600	0.064 *	E-W(1): 0.117
Westbound	RT	0.00	127	0	0.000	E-W(2): 0.179 *
	TH	1.00	48	1,600	0.126 *	V/C: 0.371
	LT	0.00	26	1,600	0.016	Lost Time: 0.100
Northbound	RT	0.00	22	0	0.000	ITS: 0.000
	TH	2.00	366	1,600	0.128 *	ICU: 0.471
	LT	0.00	22	1,600	0.014	LOS: A
Eastbound	RT	0.00	21	0	0.000	
	TH	1.00	57	1,600	0.101	
	LT	0.00	84	1,600	0.053 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	48	0	0.000	N-S(1): 0.237 *
	TH	2.00	403	1,600	0.174	N-S(2): 0.184
	LT	0.00	107	1,600	0.067 *	E-W(1): 0.119
Westbound	RT	0.00	125	0	0.000	E-W(2): 0.180 *
	TH	1.00	60	1,600	0.141 *	V/C: 0.417
	LT	0.00	41	1,600	0.026	Lost Time: 0.100
Northbound	RT	0.00	35	0	0.000	ITS: 0.000
	TH	2.00	493	1,600	0.170 *	ICU: 0.517
	LT	0.00	16	1,600	0.010	LOS: A
Eastbound	RT	0.00	25	0	0.000	
	TH	1.00	61	1,600	0.093	
	LT	0.00	63	1,600	0.039 *	

* - Denotes critical movement

Project Title: El Segundo DSP
Intersection: 2 - Main St & Grand Ave
Description: Future Base

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	73	0	0.000	N-S(1): 0.145 *
	TH	2.00	143	1,600	0.106	N-S(2): 0.142
	LT	0.00	122	1,600	0.076 *	E-W(1): 0.101
Westbound	RT	0.00	112	0	0.000	E-W(2): 0.115 *
	TH	2.00	144	1,600	0.083 *	V/C: 0.260
	LT	0.00	9	1,600	0.006	Lost Time: 0.100
Northbound	RT	0.00	13	0	0.000	ITS: 0.000
	TH	2.00	151	1,600	0.069 *	ICU: 0.360
	LT	0.00	57	1,600	0.036	LOS: A
Eastbound	RT	0.00	48	0	0.000	
	TH	2.00	206	1,600	0.095	
	LT	0.00	51	1,600	0.032 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	61	0	0.000	N-S(1): 0.208 *
	TH	2.00	180	1,600	0.120	N-S(2): 0.160
	LT	0.00	144	1,600	0.090 *	E-W(1): 0.129 *
Westbound	RT	0.00	86	0	0.000	E-W(2): 0.118
	TH	2.00	152	1,600	0.087	V/C: 0.337
	LT	0.00	40	1,600	0.025 *	Lost Time: 0.100
Northbound	RT	0.00	34	0	0.000	ITS: 0.000
	TH	2.00	281	1,600	0.118 *	ICU: 0.437
	LT	0.00	64	1,600	0.040	LOS: A
Eastbound	RT	0.00	88	0	0.000	
	TH	2.00	194	1,600	0.104 *	
	LT	0.00	50	1,600	0.031	

* - Denotes critical movement

Project Title: El Segundo DSP
Intersection: 1 - Main St & Mariposa Ave
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.08	56	133	0.383	N-S(1): 0.382
	TH	0.92	619	1,467	0.422 *	N-S(2): 0.436 *
	LT	1.00	102	1,600	0.064	E-W(1): 0.080
Westbound	RT	0.73	127	1,161	0.078	E-W(2): 0.186 *
	TH	0.27	48	439	0.109 *	V/C: 0.622
	LT	1.00	43	1,600	0.027	Lost Time: 0.100
Northbound	RT	0.05	27	85	0.305	ITS: 0.000
	TH	0.95	482	1,515	0.318	ICU: 0.722
	LT	1.00	22	1,600	0.014 *	LOS: C
Eastbound	RT	0.25	21	400	0.046	
	TH	0.75	63	1,200	0.053	
	LT	1.00	123	1,600	0.077 *	

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.06	48	104	0.419	N-S(1): 0.550 *
	TH	0.94	693	1,496	0.463	N-S(2): 0.473
	LT	1.00	107	1,600	0.067 *	E-W(1): 0.099
Westbound	RT	0.68	125	1,081	0.082	E-W(2): 0.205 *
	TH	0.32	60	519	0.116 *	V/C: 0.755
	LT	1.00	60	1,600	0.038	Lost Time: 0.100
Northbound	RT	0.06	44	91	0.464	ITS: 0.000
	TH	0.94	728	1,509	0.483 *	ICU: 0.855
	LT	1.00	16	1,600	0.010	LOS: D
Eastbound	RT	0.26	25	412	0.056	
	TH	0.74	72	1,188	0.061	
	LT	1.00	142	1,600	0.089 *	

* - Denotes critical movement

Project Title: El Segundo DSP
Intersection: 2 - Main St & Grand Ave
Description: Future with Project

Thru Lane: 1600 vph
 Left Lane: 1600 vph
 Double Lt Penalty: 10 %
 ITS: 0 %

N-S Split Phase : N
 E-W Split Phase : N
 Lost Time (% of cycle) : 10
 V/C Round Off (decs.) : 3

OLA Movements :
 FF Movements:

Date/Time: AM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.48	193	776	0.221	N-S(1):	0.249
	TH	0.52	205	824	0.249 *	N-S(2):	0.317 *
	LT	1.00	188	1,600	0.118	E-W(1):	0.250
Westbound	RT	0.46	166	730	0.169	E-W(2):	0.284 *
	TH	0.54	198	870	0.228 *	V/C:	0.601
	LT	1.00	63	1,600	0.039	Lost Time:	0.100
Northbound	RT	0.19	39	297	0.112	ITS:	0.000
	TH	0.81	171	1,303	0.131	ICU:	0.701
	LT	1.00	108	1,600	0.068 *	LOS:	C
Eastbound	RT	0.23	79	375	0.177		
	TH	0.77	258	1,225	0.211		
	LT	1.00	90	1,600	0.056 *		

Date/Time: PM PEAK HOUR

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS	
Southbound	RT	0.44	200	702	0.247	N-S(1):	0.370 *
	TH	0.56	256	898	0.285	N-S(2):	0.361
	LT	1.00	225	1,600	0.141 *	E-W(1):	0.356 *
Westbound	RT	0.45	179	723	0.177	E-W(2):	0.325
	TH	0.55	217	877	0.248	V/C:	0.726
	LT	1.00	128	1,600	0.080 *	Lost Time:	0.100
Northbound	RT	0.17	64	279	0.189	ITS:	0.000
	TH	0.83	303	1,321	0.229 *	ICU:	0.826
	LT	1.00	122	1,600	0.076	LOS:	D
Eastbound	RT	0.34	151	547	0.238		
	TH	0.66	291	1,053	0.276 *		
	LT	1.00	123	1,600	0.077		

* - Denotes critical movement

Appendix D – HCM 6th (Synchro) Calculations



Intersection	
Intersection Delay, s/veh	9
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘↘	
Traffic Vol, veh/h	6	130	116	163	140	14
Future Vol, veh/h	6	130	116	163	140	14
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	6	134	120	168	144	14
Number of Lanes	0	1	1	1	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	9.4	8.5	9.6
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	4%	0%	0%	100%	77%
Vol Thru, %	96%	100%	0%	0%	0%
Vol Right, %	0%	0%	100%	0%	23%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	136	116	163	93	61
LT Vol	6	0	0	93	47
Through Vol	130	116	0	0	0
RT Vol	0	0	163	0	14
Lane Flow Rate	140	120	168	96	63
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.199	0.171	0.207	0.161	0.1
Departure Headway (Hd)	5.105	5.135	4.431	6.014	5.735
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	701	698	808	595	623
Service Time	3.146	2.868	2.164	3.766	3.488
HCM Lane V/C Ratio	0.2	0.172	0.208	0.161	0.101
HCM Control Delay	9.4	8.9	8.3	9.9	9.1
HCM Lane LOS	A	A	A	A	A
HCM 95th-tile Q	0.7	0.6	0.8	0.6	0.3

Intersection	
Intersection Delay, s/veh	11.4
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	42	209	187	237	197	28
Future Vol, veh/h	42	209	187	237	197	28
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	45	222	199	252	210	30
Number of Lanes	0	1	1	1	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	12.8	10.6	11.4
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	0%	100%	70%
Vol Thru, %	83%	100%	0%	0%	0%
Vol Right, %	0%	0%	100%	0%	30%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	251	187	237	131	94
LT Vol	42	0	0	131	66
Through Vol	209	187	0	0	0
RT Vol	0	0	237	0	28
Lane Flow Rate	267	199	252	140	100
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.421	0.314	0.349	0.264	0.178
Departure Headway (Hd)	5.679	5.685	4.977	6.811	6.447
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	636	637	726	528	557
Service Time	3.703	3.385	2.677	4.54	4.177
HCM Lane V/C Ratio	0.42	0.312	0.347	0.265	0.18
HCM Control Delay	12.8	11	10.3	12	10.6
HCM Lane LOS	B	B	B	B	B
HCM 95th-tile Q	2.1	1.3	1.6	1.1	0.6

Intersection	
Intersection Delay, s/veh	9.3
Intersection LOS	A

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↖	↑	↗	↖↗	
Traffic Vol, veh/h	7	141	126	177	152	16
Future Vol, veh/h	7	141	126	177	152	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	145	130	182	157	16
Number of Lanes	0	1	1	1	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	9.7	8.8	9.8
HCM LOS	A	A	A

Lane	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	5%	0%	0%	100%	76%
Vol Thru, %	95%	100%	0%	0%	0%
Vol Right, %	0%	0%	100%	0%	24%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	126	177	101	67
LT Vol	7	0	0	101	51
Through Vol	141	126	0	0	0
RT Vol	0	0	177	0	16
Lane Flow Rate	153	130	182	104	69
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.219	0.187	0.228	0.177	0.111
Departure Headway (Hd)	5.179	5.196	4.492	6.099	5.809
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	691	690	797	586	614
Service Time	3.225	2.934	2.23	3.859	3.569
HCM Lane V/C Ratio	0.221	0.188	0.228	0.177	0.112
HCM Control Delay	9.7	9.1	8.6	10.2	9.3
HCM Lane LOS	A	A	A	B	A
HCM 95th-tile Q	0.8	0.7	0.9	0.6	0.4

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	44	217	194	246	205	30
Future Vol, veh/h	44	217	194	246	205	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	231	206	262	218	32
Number of Lanes	0	1	1	1	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	13.3	10.9	11.7
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	0%	100%	69%
Vol Thru, %	83%	100%	0%	0%	0%
Vol Right, %	0%	0%	100%	0%	31%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	261	194	246	137	98
LT Vol	44	0	0	137	68
Through Vol	217	194	0	0	0
RT Vol	0	0	246	0	30
Lane Flow Rate	278	206	262	145	105
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.443	0.328	0.367	0.278	0.189
Departure Headway (Hd)	5.74	5.724	5.042	6.881	6.509
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	628	629	717	523	551
Service Time	3.768	3.451	2.742	4.615	4.244
HCM Lane V/C Ratio	0.443	0.328	0.365	0.277	0.191
HCM Control Delay	13.3	11.2	10.6	12.3	10.8
HCM Lane LOS	B	B	B	B	B
HCM 95th-tile Q	2.3	1.4	1.7	1.1	0.7

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	7	141	126	297	220	16
Future Vol, veh/h	7	141	126	297	220	16
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	145	130	306	227	16
Number of Lanes	0	1	1	1	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	10.4	10.4	11
HCM LOS	B	B	B

Lane	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	5%	0%	0%	100%	82%
Vol Thru, %	95%	100%	0%	0%	0%
Vol Right, %	0%	0%	100%	0%	18%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	148	126	297	147	89
LT Vol	7	0	0	147	73
Through Vol	141	126	0	0	0
RT Vol	0	0	297	0	16
Lane Flow Rate	153	130	306	151	92
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.235	0.196	0.403	0.272	0.16
Departure Headway (Hd)	5.534	5.44	4.734	6.475	6.258
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	642	655	753	558	577
Service Time	3.63	3.218	2.512	4.175	3.958
HCM Lane V/C Ratio	0.238	0.198	0.406	0.271	0.159
HCM Control Delay	10.4	9.6	10.7	11.6	10.1
HCM Lane LOS	B	A	B	B	B
HCM 95th-tile Q	0.9	0.7	2	1.1	0.6

Intersection	
Intersection Delay, s/veh	15.8
Intersection LOS	C

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↕	↑	↗	↘	
Traffic Vol, veh/h	44	217	194	382	343	30
Future Vol, veh/h	44	217	194	382	343	30
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	47	231	206	406	365	32
Number of Lanes	0	1	1	1	2	0

Approach	EB	WB	SB
Opposing Approach	WB	EB	
Opposing Lanes	2	1	0
Conflicting Approach Left	SB		WB
Conflicting Lanes Left	2	0	2
Conflicting Approach Right		SB	EB
Conflicting Lanes Right	0	2	1
HCM Control Delay	15.8	16	15.4
HCM LOS	C	C	C

Lane	EBLn1	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	0%	0%	100%	79%
Vol Thru, %	83%	100%	0%	0%	0%
Vol Right, %	0%	0%	100%	0%	21%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	261	194	382	229	144
LT Vol	44	0	0	229	114
Through Vol	217	194	0	0	0
RT Vol	0	0	382	0	30
Lane Flow Rate	278	206	406	243	154
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.497	0.363	0.634	0.494	0.301
Departure Headway (Hd)	6.447	6.327	5.616	7.311	7.058
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	558	568	642	491	508
Service Time	4.504	4.084	3.372	5.065	4.811
HCM Lane V/C Ratio	0.498	0.363	0.632	0.495	0.303
HCM Control Delay	15.8	12.7	17.7	17	12.8
HCM Lane LOS	C	B	C	C	B
HCM 95th-tile Q	2.7	1.6	4.5	2.7	1.3

APPENDIX J: AB 52 CONSULTATION DOCUMENTATION

January 12, 2023

Gabrieleno Band of Mission Indians – Kizh Nation
Andrew Salas, Chairperson
P.O. Box 393
Covina, CA, 91723

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, and Senate Bill 18, Formal Notification of Proposed Downtown Specific Plan Update Project (Project) in the City of El Segundo (City), Los Angeles County

Dear Mr. Salas,

Pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, City of El Segundo (City) is providing you with formal notification of the Environmental Impact Report (EIR) for the Downtown Specific Plan Update Project (proposed Project), located in the City of El Segundo, California. The City, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

- A description of the proposed project and location;
- A clear and definitive statement that the tribe has 30 days to request consultation; and
- The lead agency contact information.

Project Description and Location

The Specific Plan update area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo, which is approximately 20 miles southwest from downtown Los Angeles. Downtown El Segundo is located southwest of the interchange of the Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. The Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of the Imperial Highway. The Specific Plan is bounded by Mariposa Avenue to the north and El Segundo Boulevard to the south. Los Angeles International Airport (LAX) is located to the north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east; the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west.

The El Segundo Downtown Specific Plan (Specific Plan) update is a revision to an existing regulatory plan, which serves as zoning for properties within the boundaries of the Specific Plan. The proposed Project does not involve a specific development proposal, however, it is anticipated

January 12, 2023

*Gabrieleno/Tongva San Gabriel
Band of Mission Indians*
Anthony Morales, Chairperson
P.O. Box 693
San Gabriel, CA, 91778

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, and Senate Bill 18, Formal Notification of Proposed Downtown Specific Plan Update Project (Project) in the City of El Segundo (City), Los Angeles County

Dear Mr. Morales,

Pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, City of El Segundo (City) is providing you with formal notification of the Environmental Impact Report (EIR) for the Downtown Specific Plan Update Project (proposed Project), located in the City of El Segundo, California. The City, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

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The El Segundo Downtown Specific Plan (Specific Plan) update is a revision to an existing regulatory plan, which serves as zoning for properties within the boundaries of the Specific Plan.

January 12, 2023

*Gabrielino Tongva Indians of
California Tribal Council*
Robert Dorame, Chairperson
P.O. Box 490
Bellflower, CA, 90707

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, and Senate Bill 18, Formal Notification of Proposed Downtown Specific Plan Update Project (Project) in the City of El Segundo (City), Los Angeles County

Dear Mr. Dorame,

Pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, City of El Segundo (City) is providing you with formal notification of the Environmental Impact Report (EIR) for the Downtown Specific Plan Update Project (proposed Project), located in the City of El Segundo, California. The City, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

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The El Segundo Downtown Specific Plan (Specific Plan) update is a revision to an existing regulatory plan, which serves as zoning for properties within the boundaries of the Specific Plan.

January 12, 2023

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
106 1/2 Judge John Aiso St.,#231
Los Angeles, CA, 90012

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, and Senate Bill 18, Formal Notification of Proposed Downtown Specific Plan Update Project (Project) in the City of El Segundo (City), Los Angeles County

Dear Ms. Goad,

Pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, City of El Segundo (City) is providing you with formal notification of the Environmental Impact Report (EIR) for the Downtown Specific Plan Update Project (proposed Project), located in the City of El Segundo, California. The City, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

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The Specific Plan update area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo, which is approximately 20 miles southwest from downtown Los Angeles. Downtown El Segundo is located southwest of the interchange of the Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. The Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of the Imperial Highway. The Specific Plan is bounded by Mariposa Avenue to the north and El Segundo Boulevard to the south. Los Angeles International Airport (LAX) is located to the north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east; the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west.

The El Segundo Downtown Specific Plan (Specific Plan) update is a revision to an existing regulatory plan, which serves as zoning for properties within the boundaries of the Specific Plan. The proposed Project does not involve a specific development proposal, however, it is anticipated

January 12, 2023

Gabrielino-Tongva Tribe
Charles Alvarez
23454 Vanowen Street
West Hills, CA, 91307

Re: California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, and Senate Bill 18, Formal Notification of Proposed Downtown Specific Plan Update Project (Project) in the City of El Segundo (City), Los Angeles County

Dear Mr. Alvarez,

Pursuant to California Assembly Bill (AB) 52 and Senate Bill (SB) 18, City of El Segundo (City) is providing you with formal notification of the Environmental Impact Report (EIR) for the Downtown Specific Plan Update Project (proposed Project), located in the City of El Segundo, California. The City, as lead agency, is reaching out to all groups listed on the California Native American Heritage Commission (NAHC) Sacred Lands File (SLF) Contact List in a good faith effort to provide notification of the proposed project to groups that are traditionally or culturally affiliated with the geographic area of the proposed project. The present notice includes:

- A description of the proposed project and location;
- A clear and definitive statement that the tribe has 30 days to request consultation; and
- The lead agency contact information.

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The Specific Plan update area is approximately 43.8 acres in size and is in the northwest quadrant of the City of El Segundo, which is approximately 20 miles southwest from downtown Los Angeles. Downtown El Segundo is located southwest of the interchange of the Interstate 405 Freeway (I-405) and State Route 90 (Imperial Highway), west of Pacific Coast Highway and north of El Segundo Boulevard. The Interstate 105 Freeway (I-105) is north of the Specific Plan area, immediately north of the Imperial Highway. The Specific Plan is bounded by Mariposa Avenue to the north and El Segundo Boulevard to the south. Los Angeles International Airport (LAX) is located to the north; the Los Angeles County community of Del Aire and the City of Hawthorne are located to the east; the City of Manhattan Beach is located to the south; and the Hyperion Sewage Treatment Plant, Dockweiler Beach, and Pacific Ocean are located to the west.

The El Segundo Downtown Specific Plan (Specific Plan) update is a revision to an existing regulatory plan, which serves as zoning for properties within the boundaries of the Specific Plan. The proposed Project does not involve a specific development proposal, however, it is anticipated

Subject: *California Environmental Quality Act Public Resources Code section 21080.3, subd.(b) California Assembly Bill 52, and Senate Bill 18, Formal Notification of Proposed Downtown Specific Plan Update Project (Project) in the City of El Segundo (City), Los Angeles County*

The proposed Project does not involve a specific development proposal, however, it is anticipated that new commercial and residential development will occur within the Specific Plan area during the planning period. The Land Use Demand table below provides proposed market demand projections within the Specific Plan area (through 2040):

LAND USE DEMAND IN DOWNTOWN EL SEGUNDO	
	Proposed Project
<i>Retail and Restaurant</i>	130,000 square feet
<i>Office</i>	200,000 square feet
<i>Medical Office</i>	24,000 square feet
<i>Residential Units</i>	300 units

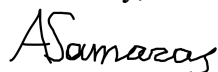
A more detailed overview of the proposed Project is provided in Exhibit No. 1 of this letter.

Project Involves Ground Disturbance: Yes

Consultation Request

If you have any comments or concerns regarding potential impacts to tribal cultural resources (as defined in Public Resources Code § 21074) in relation to the proposed project, or would like to request any additional information, please contact the City at address below or via email to Paul Samaras at PSamaras@elsegundo.org within 30 days of receipt of this notice with a formal request for consultation. Please include in this response the name of a designated lead contact person.

Sincerely,



Paul Samaras, AICP, Principal Planner
City of El Segundo
350 Main Street
El Segundo, California 90245

Attachments:

1. *Notice of Preparation (NOP) of an Environmental Impact Report (EIR)*



NOTICE OF PREPARATION

OF AN ENVIRONMENTAL IMPACT REPORT AND PUBLIC SCOPING MEETING

City Project No.:	Environmental Assessment No. EA 1311, General Plan Amendment No. GPA 21-01, Zone Change No. ZC 21-01, and Specific Plan Amendment No. SPA 21-01
Project Name:	El Segundo Downtown Specific Plan Update
Project Address:	Downtown El Segundo (see Figures 1 and 2 for project location and project area boundary)
Public Comment Period:	January 12, 2023 through February 13, 2023
Public Scoping Meeting:	February 2, 2023 from 5:30 PM to 7:00 PM
Public Scoping Meeting Location:	City Hall Council Chambers 350 Main Street, El Segundo 90245

Pursuant to Section 21165 of the California Public Resources Code and Section 15050 of the California Environmental Quality Act (CEQA) Guidelines, the City of El Segundo (City) is the Lead Agency for the preparation of a Programmatic Environmental Impact Report (PEIR) for the proposed El Segundo Downtown Specific Plan Update Project (Specific Plan/project). In accordance with CEQA Guidelines Section 15082, the City has prepared this Notice of Preparation (NOP) to provide responsible and trustee agencies, the Office of Planning and Research, and the County Clerk with sufficient information describing the project and its potential environmental effects to enable the responsible agencies to make a meaningful response to this NOP.

The City is requesting your agency's specific and detailed input regarding the scope and content of the environmental information related to your agency's statutory responsibility that must be included in the Draft PEIR. Pursuant to CEQA Guidelines Section 15083, this NOP also serves to facilitate consultation with any persons or organizations that may be concerned with the environmental effects of the Project. Additionally, this NOP serves as a notice for the public Scoping Meeting, which is held to expedite and facilitate the consultation process. The City of El Segundo has reviewed the above project and has prepared an Initial Study in accordance with California Environmental Quality Act (CEQA) Guidelines Section 15070.

Project Location. The Specific Plan Update area (project area) is in Downtown El Segundo, in the northwest quadrant of the City of El Segundo. The project area is approximately 43.8 acres in size. The project area is irregular in shape with portions extending to Eucalyptus Drive to the east, El Segundo Boulevard to the south, Concord Street to the west, and Mariposa Avenue to the north. The project area is currently developed with a wide range of commercial, residential, and public uses. The project area location is shown in **Figure 1, Regional Location** and **Figure 2, Specific Plan Update Project Boundary**.

Project Description Overview. The project is a revision to the existing El Segundo Downtown Specific Plan, which serves as land use and zoning for properties within the boundaries of the Specific Plan area. The project would revise the existing Specific Plan planning districts, amend General Plan and zoning designations on eight parcels,

and include mobility enhancements. The project would include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

The Specific Plan Update proposes to expand the boundaries of the Downtown Specific Plan area to include eight parcels located on Standard Street to the north and south of Grand Avenue. The project proposes amendments to the Land Use Element of the City’s General Plan to change the land use designation on eight parcels from Downtown Commercial to Downtown Specific Plan. The project would also amend the City’s zoning map to change the zoning on eight parcels from Downtown Commercial (C-RS) to Downtown Specific Plan (DSP). The existing and proposed land use and zoning are shown in **Figures 3** through **6**.

The project is proposed to accommodate future market demand in the project area. Potential demand within the project area (through 2040) is projected as follows (rounded):

PROPOSED LAND USE CHANGE IN DOWNTOWN EL SEGUNDO	
	Proposed
<i>Retail and Restaurant</i>	130,000 square feet
<i>Office</i>	200,000 square feet
<i>Medical Office</i>	24,000 square feet
<i>Residential Units</i>	300 units

In addition to land use and zoning changes, the project would include mobility enhancements including expanding pedestrian areas along portions of Main Street, Richmond Street, and Grand Avenue, which would create potential changes to the number of travel lanes on those streets. The project would eliminate a portion of an existing truck route that is located on Main Street between El Segundo Boulevard and Grand Avenue; proposes the potential closure of a portion of Richmond Street to vehicles, generally from Franklin Avenue to Grand Avenue to create a permanent pedestrian only street for outdoor dining and gathering; and include buffered bicycle lanes on Main Street and Grand Avenue. The project would include pedestrian and transit improvements in the project area including widened sidewalks. Transit improvements could include bus stop enhancements and potentially new and/or relocated bus stops. Widened sidewalks would also provide expanded outdoor seating and dining areas for area restaurants.

The project would include modifications to parking standards and strategies and alternatives for on-street parking and two new parking structures at the northwest corner of Grand Avenue and Standard Street and the northeast corner of Richmond and Franklin. Lastly, the 2000 Specific Plan area was previously divided into six districts and the Specific Plan update would adjust the Specific Plan area into four distinct districts: Main Street, Richmond Street, Grand Avenue, and Civic Center districts. **Figure 7, Proposed Specific Plan Districts**, shows the four districts.

Potential Environmental Effects of the Project. The project could have potentially significant environmental impacts to the following environmental topic areas: Aesthetics; Air Quality; Cultural Resources; Energy; Greenhouse Gas Emissions; Hazards and Hazardous Materials; Land Use and Planning; Noise; Paleontology; Population and Housing; Public Services and Recreation; Transportation; Tribal Cultural Resources; and Utilities/Service Systems.

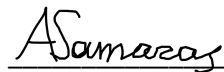
Because of the existing condition of the project area, which is fully developed and located in an urbanized setting, implementation of the Specific Plan is not expected to result in any significant impacts to: Agriculture and Forestry Resources; Biological Resources; Geology/Soils; Mineral Resources; and Wildfire. The City is proposing to “scope out” these topics from the Draft PEIR without further study, as summarized in this NOP’s Appendix A, Initial Study.

This NOP, including Appendix A, is available for electronic download on the City’s website at: <https://www.elsegundo.org/downtownupdate>.

Public Scoping Meeting. The project Scoping Meeting will be held in person at the location noted below. The Scoping Meeting will involve a presentation about the proposed project and the environmental review process and schedule. The purpose of the meeting is to facilitate the receipt of written comments about the scope and content of the environmental analysis to be addressed in the Draft PEIR. The Scoping Meeting is for information-gathering, is not a public hearing, and no public testimony will be taken. No decisions about the Project will be made at the Scoping Meeting. A separate public hearing for entitlement requests will be scheduled after the completion of the Draft PEIR. The date, time, and website of the project’s Scoping Meeting are as follows:

Date and Time: February 2, 2023 from 5:30 PM to 7:00 PM
Scoping Meeting Location: City Hall Council Chambers
350 Main Street, El Segundo 90245

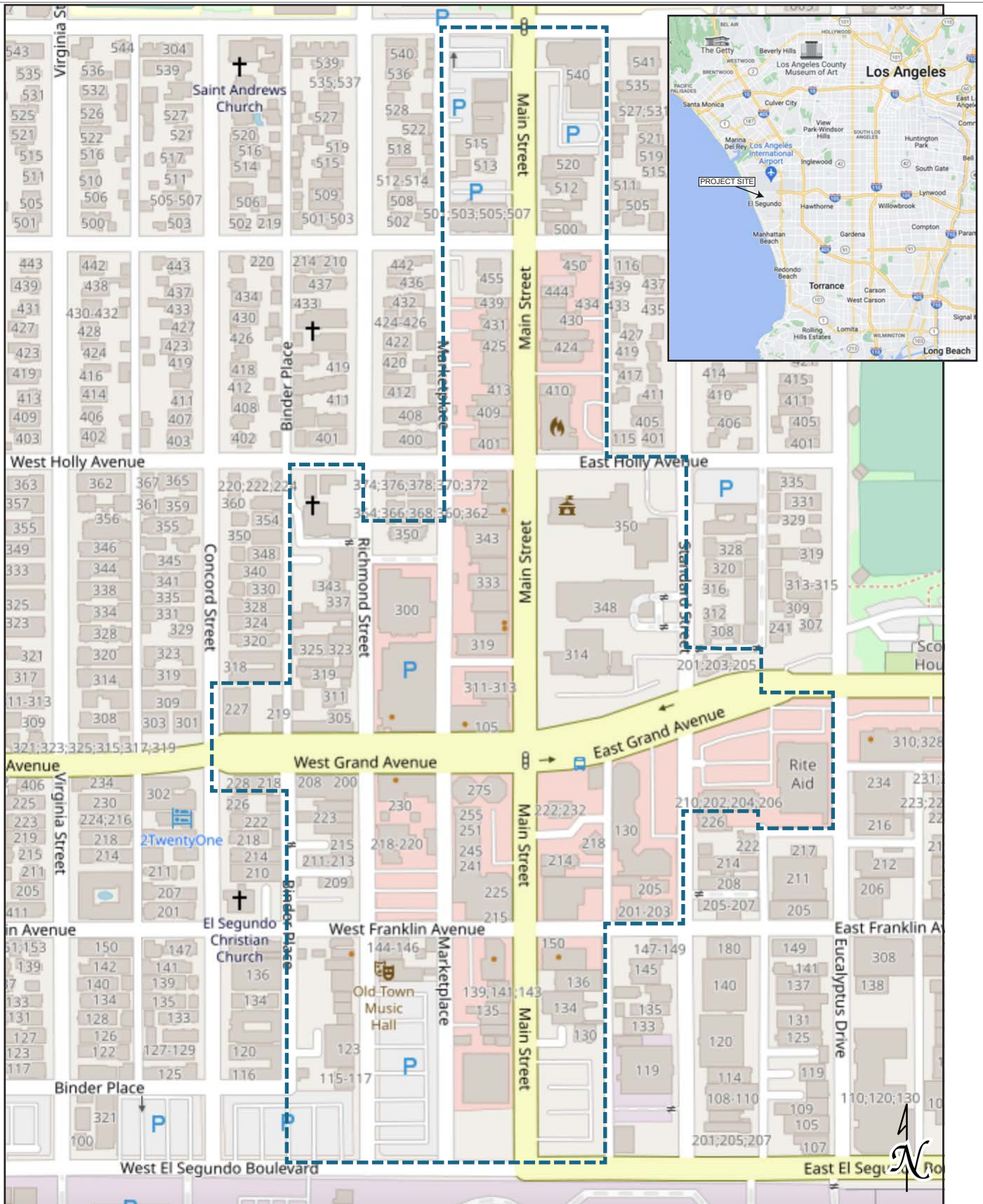
Submitting Comments. The City will consider all written comments regarding the potential environmental effects of the project received during the NOP public review period. All written comments received will be reviewed and considered by the City as part of the environmental analysis of the proposed project and will become a part of the public record for the Draft PEIR. Written comments will be accepted during the Scoping Meeting, via email, and/or via mail, and must be received by the City by **5:00 P.M., February 13, 2023**. Please direct your written comments to Paul Samaras, City of El Segundo, Community Development Department, 350 Main Street, El Segundo, CA 90245, or email psamaras@elsegundo.org.



Paul Samaras, AICP
Principal Planner

1/6/2023

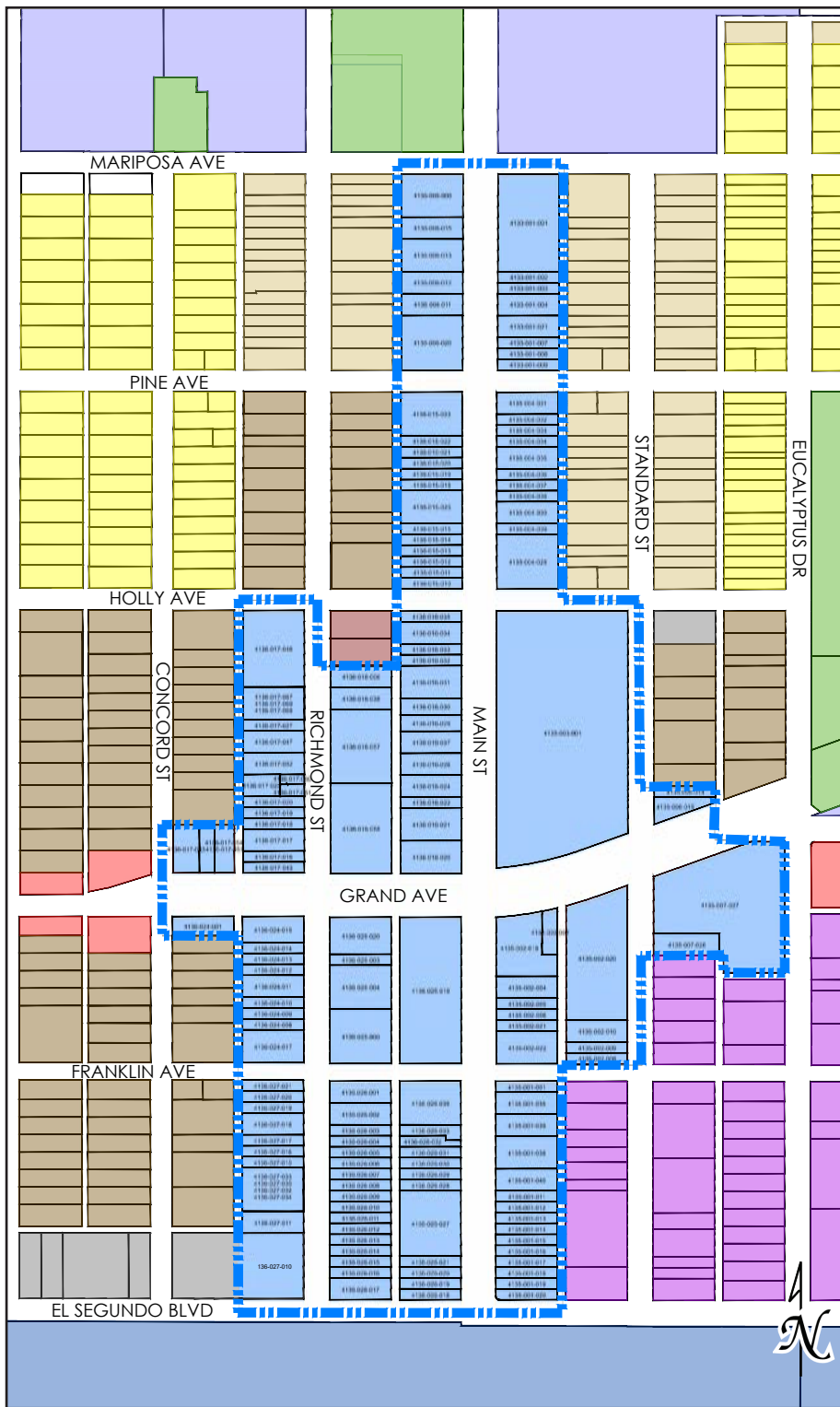
Date



 Project Area

Source: OpenStreetMaps and Google Maps, December 2022.

Figure 1
Regional Location Map



LEGEND

- Project Area Boundary
- Single-Family Residential
- Downtown Commercial
- Two-Family Residential
- General Commercial
- Downtown Specific Plan
- Multi-Family Residential
- Smoky Hollow
- Parks
- Heavy Industrial
- Parking

Source: RRM Design Group, August 2022.

Figure 2
Specific Plan Update Project Boundary



LEGEND













Project Area Boundary	Single-Family Residential	Downtown Commercial
Downtown Specific Plan	Two-Family Residential	General Commercial
	Multi-Family Residential	Public Facilities
	Smoky Hollow	Heavy Industrial
	Parks	Parking

Source: RRM Design Group, August 2022.

Figure 3
Existing Land Use Designations



LEGEND

 Project Area Boundary	 Single-Family Residential	 Downtown Commercial
 Downtown Specific Plan	 Two-Family Residential	 General Commercial
	 Multi-Family Residential	 Public Facilities
	 Smoky Hollow	 Heavy Industrial
	 Parks	 Parking

Source: RRM Design Group, August 2022.

Figure 4
Proposed Land Use Designations



LEGEND

- - - Project Area Boundary
- Single-Family Residential (R-1)
- Two-Family Residential (R-2)
- Multi-Family Residential (R-3)
- Open Space (O-S)
- Downtown Specific Plan (DSP)
- Neighborhood Commercial (C-2)
- Public Facilities (P-F)
- Smoky Hollow West (SHW)
- Parking (P)
- Downtown Commercial (C-RS)
- Heavy Manufacturing (M-2)

Source: RRM Design Group, August 2022.

Figure 5
Existing Zoning



Source: RRM Design Group, August 2022.

Figure 6
Proposed Zoning

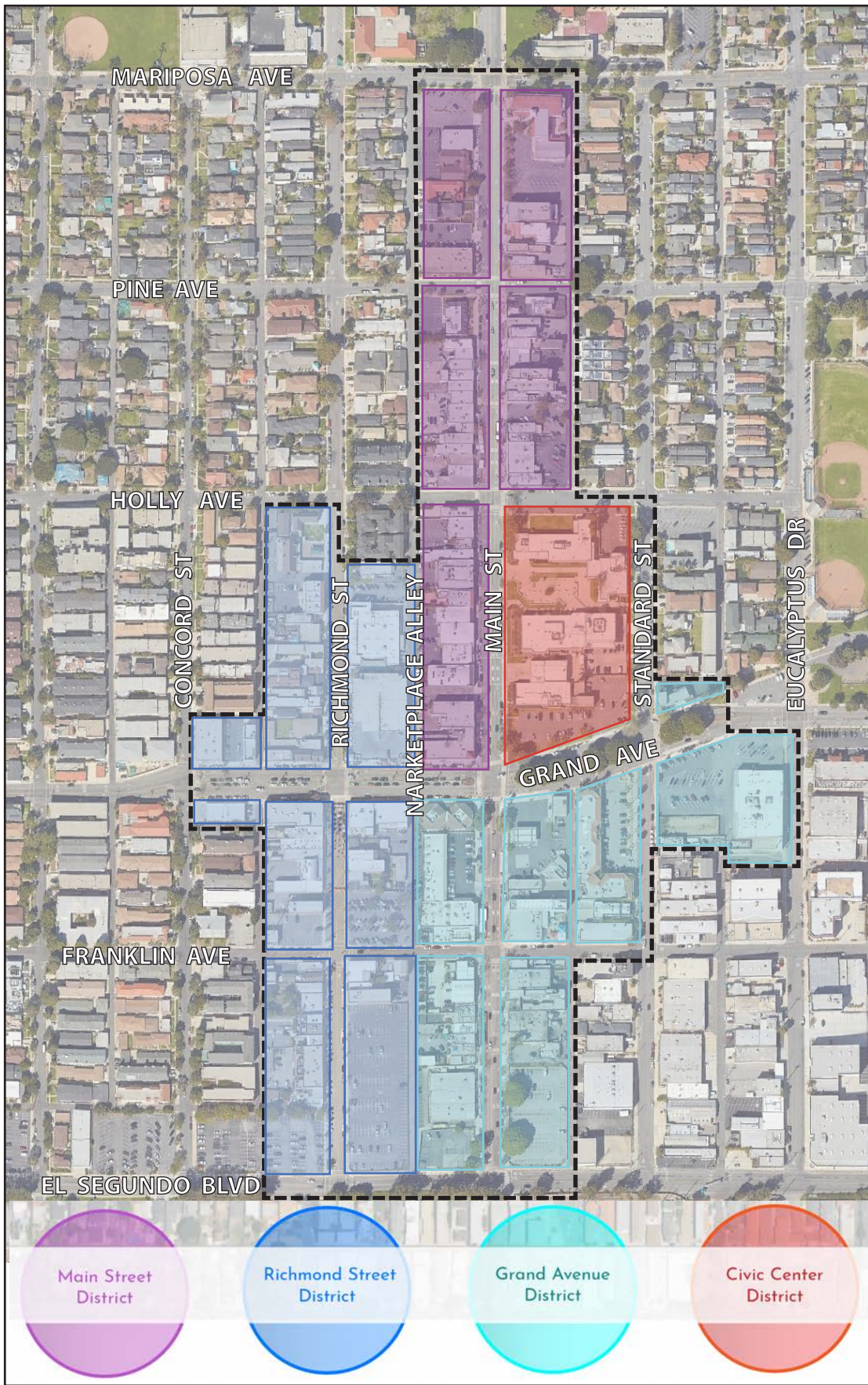


Figure 7
Proposed Specific Plan Districts



GABRIELENO BAND OF MISSION INDIANS - KIZH NATION
Historically known as The San Gabriel Band of Mission Indians recognized by
the State of California as the aboriginal tribe of the Los Angeles basin

January 20,2023

Project Name: Downtown Specific Plan Update Project, City of El Segundo. Los Angeles County

Thank you for your letter dated January 12,2023. Regarding the project above. This is to concur that we agree with the Specific Plan. However, our Tribal government would like to request consultation for all future projects within this location.

Andrew Salas, Chairman
Gabrieleno Band of Mission Indians – Kizh Nation

Andrew Salas, Chairman
Albert Perez, treasurer I

Nadine Salas, Vice-Chairman
Martha Gonzalez Lemos, treasurer II

Dr. Christina Swindall Martinez, secretary
Richard Gradias, Chairman of the council of Elders

PO Box 393 Covina, CA 91723

www.gabrielenoindians@yahoo.com

gabrielenoindians@yahoo.com

APPENDIX K: WATER SUPPLY ASSESSMENT

EL SEGUNDO DOWNTOWN SPECIFIC PLAN UPDATE

WATER SUPPLY ASSESSMENT

Executive Summary

This executive summary briefly presents the Water Supply Assessment sections and a table of new development projects' net added demand. This Water Supply Assessment (WSA) was prepared in December 2023 for the City of El Segundo (City) Downtown Specific Plan Update Draft Environmental Impact Report (DEIR). The Downtown Specific Plan Update (DSP Update) is a revision to the existing El Segundo Downtown Specific Plan, which guides land use and zoning for properties within the boundaries of the DSP area. If adopted, the DSP Update will revise the existing DSP planning districts and amend the General Plan and zoning designations on eight parcels. The DSP Update will include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes. Per California Water Code Section 10910, this WSA evaluates the projected water demand associated with the DSP Update, in addition to existing and planned future uses in the City's water service area. This WSA evaluated the demands associated with identified current and future development including residential, commercial, and mixed residential-commercial sites, which in some cases are part of the City's 2021-2029 Housing Element.

In this WSA, all planned future developments are considered. These developments are entitled, under construction, in application review, and/or estimated/planned in the City service area starting in 2023 and are estimated to be completed within the next 20 years. This WSA evaluated planned future developments including training facilities, office building expansions, mixed-use sites, etc. as listed in Table 1. By incorporating demand from all known projected development projects, a more detailed El Segundo service area demand projection has been estimated for determining water supply availability for the DSP Update.

The requirements for a WSA are described in the California Water Code Sections 10910 through 10915, amended by the enactment of Senate Bill 610 (SB 610) in 2002. SB 610 requires an assessment of whether the City of El Segundo's total projected water supplies available during normal, single dry and multiple dry water years, during a 20-year projection, are sufficient to meet the projected water demand associated with the DSP Update, in addition to existing and planned future uses in the El Segundo service area (see Wat. Code § 1091(c)(3)).

The City is currently one of numerous cities who is supplied potable and recycled water from West Basin Municipal Water District (WBMWD). WBMWD's primary supply source is imported water from the Colorado River and State Water Project (SWP) supplied from Metropolitan Water District of Southern California (MWD), transported via MWD pipelines and aqueducts. West Basin is the fourth-largest member agency of MWD.

This WSA builds on previous water demand projections created as part of the El Segundo 2020 Urban Water Management Plan (UWMP), and previous water supply projections created as part of the WBMWD 2020 UWMP. Baseline potable water use is based on an average of 2018 and 2019 consumption. This period was selected because the following three years each presented unique challenges: 2020 demand was affected by COVID-19 pandemic shut-downs and work-from-home trends; 2021 demand was affected by a sewer spill requiring supplemental potable water use in the recycled water system; and year 2022 demand was affected by drought restrictions. Using the higher average 2018 and 2019 consumption volume to establish the year 2023 baseline demand accounts for some drought rebound. That drought rebound is expected following the lower year 2022 potable demand consumption. Due to the City's 2020 UWMP having reported 'no growth in demand,' this baseline demand assumes no growth volume through the year 2045 and assumes no adjustment due to active or passive savings; again, being consistent with what the City's 2020 UWMP reported. Recycled water baseline use in this WSA analysis is based on the City's 2020 UWMP Table 4.1.9: Total Water Demands, which reports recycled water use through 2040. No change in recycled water demand is estimated from 2040 and 2045 in the baseline recycled demand projection volume. Despite potable demand (*without* additional projects) remaining static at estimated baseline year 2023 levels, since total projected recycled water demand is estimated to

decrease between 2020 and 2040 (according to the El Segundo 2020 UWMP), total future system demand projection (even *with* additional development projects) is expected to decrease between 2025 and 2040.

All the development projects included in this WSA are within the City’s service area. The process of estimating net water demand for development project sites is dynamic, and by the next WSA submittal there will be more actual site data available under normal-year conditions and with the new-normal impacts of the recent/ongoing pandemic. The City has completed this WSA based on the land uses proposed for the developments presented in Table 1. In some cases, a portion of an earlier, larger development effort with anticipated completion after 2023 is included here. Future development-project net demands are primarily estimated using available water use data for similar land use developments that have been constructed recently. Net demand considers existing site water use including buildings that will be demolished and/or landscapes that will be converted. These projects meet or will meet the City's "Water Conservation in Landscaping" regulations (ESMC Chapter 15-15A), which are consistent with California Model Water Efficiency Landscape Ordinance (MWELo) requirements.

As presented in the following table, this WSA determined that future development will yield a net combined potable and recycled demand of 1,100 acre-feet per year (AFY) and approximately 6,250 more people by year 2045. An additional demand of approximately 44 AFY was added to this subtotal to account for an apportioned total system water loss of 4%, resulting in a grand total net demand of 1,144 AFY by year 2045. Individual future development net new demand and added population values between 2020 and 2045 are summarized in five-year increments in Table 5 and 6, found in Section IV: Water Demand Projections. As of November 2023, it is estimated that by the year 2045, approximately 2% of total service area net added demand from future new development projects will be served by recycled water.

Table 1. El Segundo Service Area Post-2020 Development Schedule, Net Demand & Net Population

Development Project	Development Schedule	Net Population	Net Demand (AFY)
Housing Element	2020-2035	4,670	228
Downtown Specific Plan Update	2030-2035	760	121
Pacific Coast Commons Specific Plan	2025-2030	670	55
South Campus (Raytheon) Specific Plan	2025-2035	0	441
Stick n Stein Mixed Use (EA 1325)	2025-2030	130	8
201-209 Richmond St (EA 1299)	2025-2030	10	2
Beach Cities Media Campus Phase 1 & 2 (EA 1339)	2025-2030	0	59
650-700 N PCH Office (EA 1289)	2025-2030	0	16
1950-1960 E Grand Ave Office	2025-2030	0	17
Smoky Hollow Specific Plan (partial)	2020-2040	10	110
140 Oregon Office Addition (EA 1233)	2020-2025	0	7
141 Eucalyptus Dr Office (EA 1292)	2025-2030	0	1
445 N Douglas - Data Center Phase 2	2025-2030	0	33
2200 Grand Parking Structure & Offices	2025-2030	0	2
Subtotal Developments		6,250	1,100

Notes:

1. Net demand includes potable and recycled water demands.
2. Schedule includes project development through site water demand online timing.
3. Zero population values represent no residential development, but rather a solely nonresidential development project.
4. Population values are rounded to the nearest 10 people.

This WSA shows there will continue to be sufficient supplies to meet all projected potable and recycled demand, including the additional demand generated from the proposed developments, until year 2045.

Therefore, this WSA concludes that there is “sufficient water supply” (per Government Code 664737.7 (a)(2)) available to meet the demands of the DSP Update and Housing Element, in addition to all existing and known

planned future uses evaluated in this WSA for the service area, during normal, single dry and multiple dry water years within a 20-year projection.

Introduction

This section presents this document’s purpose, a project description, scope of investigation, and persons and documents consulted. The City of El Segundo is currently one of numerous cities who is supplied potable and recycled water from West Basin Municipal Water District (WBMWD). WBMWD's primary drinking water supply source is imported water from the Colorado River and State Water Project (SWP) supplied from Metropolitan Water District of Southern California (MWD), transported via MWD pipelines and aqueducts. West Basin is the fourth-largest member agency of MWD. West Basin also produces up to 40 million gallons per day of recycled water for landscape, industrial, and groundwater replenishment purposes.

10910. (a) Any city or county that determines that a project, as defined in Section 10912, is subject to the California Environmental Quality Act (Division 13 (commencing with Section 21000) of the Public Resources Code) under Section 21080 of the Public Resources Code shall comply with this part.

10912. For the purposes of this part, the following terms have the following meanings:

(a) “Project” means any of the following:

- (1) A proposed residential development of more than 500 dwelling units.*
- (2) A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space.*
- (3) A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space.*
- (4) A proposed hotel or motel, or both, having more than 500 rooms.*
- (5) A proposed industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 square feet of floor area.*
- (6) A mixed-use project that includes one or more of the projects specified in this subdivision.*
- (7) A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.*

(b) If a public water system has fewer than 5,000 service connections, then “project” means any proposed residential, business, commercial, hotel or motel, or industrial development that would account for an increase of 10 percent or more in the number of the public water system’s existing service connections, or a mixed-use project that would demand an amount of water equivalent to, or greater than, the amount of water required by residential development that would represent an increase of 10 percent or more in the number of the public water system’s existing service connections.

(c) “Public water system” means a system for the provision of piped water to the public for human consumption that has 3,000 or more service connections. A public water system includes all of the following:

- (1) Any collection, treatment, storage, and distribution facility under control of the operator of the system that is used primarily in connection with the system.*
- (2) Any collection or pretreatment storage facility not under the control of the operator that is used primarily in connection with the system.*
- (3) Any person who treats water on behalf of one or more public water systems for the purpose of rendering it safe for human consumption.*

10910. (b) The city or county, at the time that it determines whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required for any project subject to the California Environmental Quality Act pursuant to Section 21080.1 of the Public Resources Code, shall identify any water system whose service area includes the project site and any water system adjacent to the project site that is, or may become as a result of supplying water to the project identified pursuant to this subdivision, a public water system, as defined in Section 10912, that may supply water for the project. If the city or county is not able to identify any public water system that may supply water for the project, the city or county shall prepare the water assessment required by this part after consulting with any entity serving domestic water supplies whose service area includes the project site, the local agency formation commission, and any public water system adjacent to the project site.

Purpose and Authorization

The El Segundo Downtown Specific Plan Update (DSP Update) is considered a “project” under the California Environmental Quality Act (CEQA) and is therefore subject to CEQA review. The City of El Segundo (City), as the Lead Agency, has prepared a Program Environmental Impact Report (EIR) for the proposed project in accordance with CEQA, implementing the CEQA Guidelines, relevant case law, and City procedures.

As the public water supplier for the service area, the City of El Segundo has prepared this Water Supply Assessment (WSA) to evaluate whether the service area’s total projected water supplies available during normal, single dry and multiple dry water years, during a 20-year projection, are sufficient to meet the projected water demand associated with the DSP Update, in addition to existing and planned future uses (Water Code §10910(c)(3)).

This WSA does not create a right or entitlement to water service or define any specific level of water service (per Water Code Section 10914). The provision of water service will continue to be undertaken in a manner consistent with applicable City policies and procedures, consistent with existing law.

The WSA has been developed by the collaborative efforts of the project team consisting of Maddaus Water Management Inc., EcoTierra Consulting, City of El Segundo Community Development Department, and City of El Segundo Water Division. EcoTierra Consulting is leading the EIR for the Downtown Specific Plan Update; Maddaus Water Management provided calculations for the estimated water demand of all developments included in the WSA and created this WSA report; City of El Segundo City staff provided information on all other development projects and demands contained within the report.

Project Background

The DSP Update is a revision to the existing El Segundo Downtown Specific Plan, which guides land use and zoning for properties within the boundaries of the Downtown Specific Plan area. If adopted, the DSP Update will revise the existing DSP planning districts, amend the General Plan and zoning designations on eight parcels. The DSP Update will include public improvements and streetscape guidelines, private urban form criteria, permitted land uses, development standards, mobility and infrastructure improvements, an implementation plan, and administration processes.

This project will result in additional net development of 65,000 square feet of retail space, 65,000 square feet of restaurant space, 200,000 square feet of office space, 24,000 square feet of medical office space, and 300 residential units (multi-family). The following figure presents El Segundo's DSP Update project area in orange on a map of the regional setting.¹

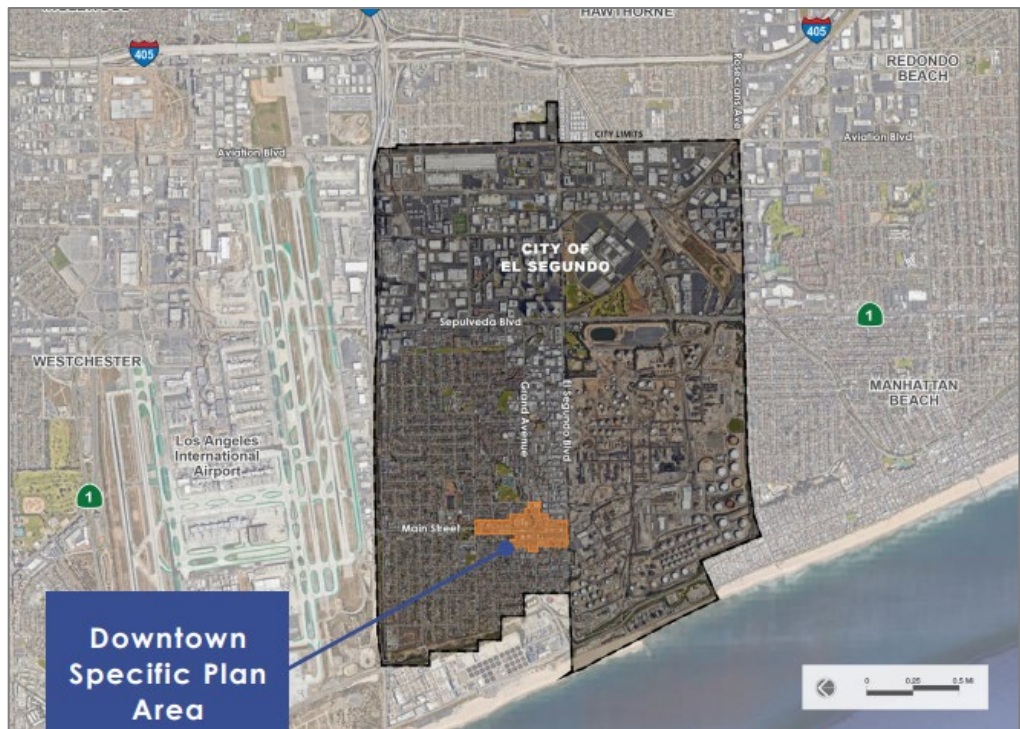


Figure 1. Downtown Specific Plan Update Project Area
 Source: El Segundo Downtown Specific Plan – May 2023

¹ City of El Segundo. (May 2023). *El Segundo Downtown Specific Plan. Public Review Draft*, accessed July 2023. <https://www.elsegundo.org/home/showpublisheddocument/7039/638200972608070000>

Scope of Assessment

10910. (h) Notwithstanding any other provision of this part, if a project has been the subject of a water supply assessment that complies with the requirements of this part, no additional water supply assessment shall be required for subsequent projects that were part of a larger project for which a water supply assessment was completed and that has complied with the requirements of this part and for which the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has concluded that its water supplies are sufficient to meet the projected water demand associated with the proposed project, in addition to the existing and planned future uses, including, but not limited to, agricultural and industrial uses, unless one or more of the following changes occurs:

- (1) Changes in the project that result in a substantial increase in water demand for the project.
- (2) Changes in the circumstances or conditions substantially affecting the ability of the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), to provide a sufficient supply of water for the project.
- (3) Significant new information becomes available that was not known and could not have been known at the time when the assessment was prepared.

Per Water Code Section 10910, this WSA evaluates the projected water demand associated with the DSP Update, in addition to existing and planned future uses in the City of El Segundo water service area. This WSA evaluated the demands associated with identified current and future development including residential, mixed-residential, and commercial sites, in some cases part of the City's 2021-2029 Housing Element.

In this WSA, all planned future developments using water are included as estimated by City staff. These developments are entitled, under construction, in application review, or estimated/planned in the El Segundo service area starting in 2023 and are estimated to be completed within the next 20 years. This WSA evaluated planned future developments including training facilities, office building expansions, mixed-use sites, etc. as listed in Table 5 of the WSA. By incorporating demands from all known projected development projects, a more detailed El Segundo service area demand has been developed for determining water supply availability for the DSP Update. A map on the following page presents the El Segundo service area with the development projects' locations identified.

Documents and Persons Consulted

Pursuant to Water Code § 10910(c)(3), this WSA was prepared based on relevant information, including information provided by the City of El Segundo and WBMWD staff. Several development-project-specific environmental documents and water supply assessments were also reviewed and included in the list of documents and persons consulted below:

1. City of El Segundo. (April-November 2023). *Supplemental System and Development Project Information* (personal communications with Paul Samaras, Anthony Esparza, and Eduardo Schonborn)
2. City of El Segundo Community Development Department. (November 15, 2022). *City of El Segundo 2021-2029 Housing Element*.
<https://www.elsegundo.org/home/showpublisheddocument/6575/638112938870030000>
3. City of El Segundo. (May 2023). *El Segundo Downtown Specific Plan. Public Review Draft*, accessed July 2023. <https://www.elsegundo.org/home/showpublisheddocument/7039/638200972608070000>
4. City of El Segundo. (October 2018). Final Environmental Impact Report for the Smoky Hollow Specific Plan Update. State Clearinghouse No. 2017031071.
5. Dudek. (February 2021). *The Pacific Coast Commons DEIR: Pacific Coast Commons Specific Plan. Draft Environmental Impact Report*, State Clearinghouse No. 2020050508.
<https://ceqanet.opr.ca.gov/2020050508/3>
6. EcoTierra Consulting. (March 1, 2019). *Beach Cities Media DEIR: Proposed Beach Cities Media Campus Project. Draft Environmental Impact Report*. State Clearinghouse No.: 2017121035.
<https://ceqanet.opr.ca.gov/2017121035/2>
7. Eki Environment & Water, Inc. (September 2022). *Water Supply Assessment for 601 Harbor Boulevard Project Mid-Peninsula Water District*.

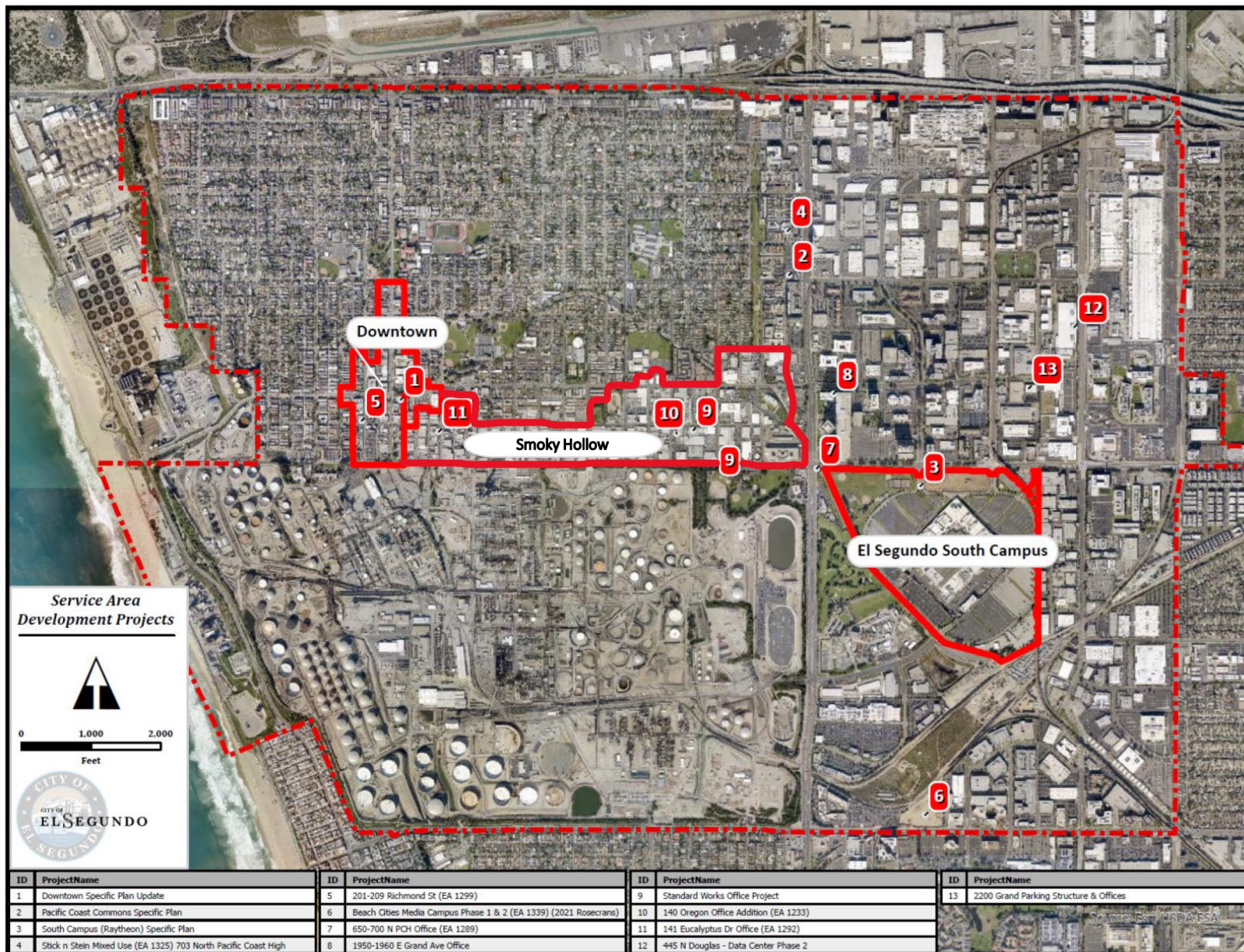


Figure 2. El Segundo Service Area with New Development Projects

8. Kimley Horn. (November 2021). *Raytheon – Training Facility EIR Addendum: Professional Sports Headquarters and Training Facility Project. Addendum to the Raytheon El Segundo South Campus Specific Plan Project. Certified Final Environmental Impact Report (SCH No. 2012101081)*. <https://ceqanet.opr.ca.gov/2012101081/5>
9. Metropolitan Water District of Southern California. (July 20, 2022). Special Variable Rate Water Revenue Refunding Bonds, 2022 Series C. https://bondlink-cdn.com/2089/2022_MetropolitanWaterDistrictSouthernCalifornia_SeriesC_OS.eT60sXRaN.pdf
10. Michael Baker International. (June 2022). *Draft Initial Study/Mitigated Negative Declaration. 1950-1960 East Grand Avenue Project. 1950 & 1960 East Grand Avenue (EA 1291)*. <https://www.destinationsegundo.com/home/showpublisheddocument/5815/637952089076670000>
11. MIG Inc. (December 13, 2021). *Smoky Hollow Specific Plan Amendment (SPA21-01) and Community Benefit Plans for the Standard Works Project at 1320-1330 E. Franklin Avenue (CBP19-03) and 1475 E. El Segundo Boulevard (CBP19-02). Initial Study*. <https://files.ceqanet.opr.ca.gov/274746-1/attachment/T5Bxa08cyp8cH1DkZCbQFbTKum9Mhtut02FGH79mHOEsGHpHaftvtT4KFCy7qTN8LWWzmUWRXmm0xju0>
12. State of California, Department of Finance. (May 2023). *E-4 Population Estimates for Cities, Counties, and the State, 2021-2023, with 2020 Census Benchmark. Sacramento, California*. https://dof.ca.gov/wp-content/uploads/sites/352/Forecasting/Demographics/Documents/E-4_2023_InternetVersion.xlsx
13. Water Systems Consulting, Inc. (June 28, 2021). *West Basin Municipal Water District 2020 Urban Water Management Plan*. <https://www.westbasin.org/wp-content/uploads/2021/08/West-Basin-2020-Urban-Water-Management-Plan.pdf>
14. West Basin Municipal Water District. Imported Water Fact Sheet. (July 22, 2021). <https://www.westbasin.org/wp-content/uploads/2021/08/07-22-21-Imported-Water-Fact-Sheet.pdf>
15. West Basin Municipal Water District. (May-August 2023). Personal communication.

El Segundo's Water Supply Source

This section presents El Segundo's water supply source information and volume under normal and dry year conditions.

10910. (d) (1) The assessment required by this section shall include an identification of any existing water supply entitlements, water rights, or water service contracts relevant to the identified water supply for the proposed project, and a description of the quantities of water received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts.

10910. (d) (2) An identification of existing water supply entitlements, water rights, or water service contracts held by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall be demonstrated by providing information related to all of the following:

(A) Written contracts or other proof of entitlement to an identified water supply.

(B) Copies of a capital outlay program for financing the delivery of a water supply that has been adopted by the public water system.

(C) Federal, state, and local permits for construction of necessary infrastructure associated with delivering the water supply.

(D) Any necessary regulatory approvals that are required in order to be able to convey or deliver the water supply.

(e) If no water has been received in prior years by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), under the existing water supply entitlements, water rights, or water service contracts, the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), shall also include in its water supply assessment pursuant to subdivision (c), an identification of the other public water systems or water service contract holders that receive a water supply or have existing water supply entitlements, water rights, or water service contracts, to the same source of water as the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has identified as a source of water supply within its water supply assessments.

10910. (d) (2) cont.

(f) If a water supply for a proposed project includes groundwater, the following additional information shall be included in the water supply assessment:

(1) A review of any information contained in the urban water management plan relevant to the identified water supply for the proposed project.

(2) (A) A description of any groundwater basin or basins from which the proposed project will be supplied.

(B) For those basins for which a court or the board has adjudicated the rights to pump groundwater, a copy of the order or decree adopted by the court or the board and a description of the amount of groundwater the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), has the legal right to pump under the order or decree.

(C) For a basin that has not been adjudicated that is a basin designated as high- or medium-priority pursuant to Section 10722.4, information regarding the following:

(i) Whether the department has identified the basin as being subject to critical conditions of overdraft pursuant to Section 12924.

(ii) If a groundwater sustainability agency has adopted a groundwater sustainability plan or has an approved alternative, a copy of that alternative or plan.

(D) For a basin that has not been adjudicated that is a basin designated as low- or very low priority pursuant to Section 10722.4, information as to whether the department has identified the basin or basins as overdrafted or has projected that the basin will become overdrafted if present management conditions continue, in the most current bulletin of the department that characterizes the condition of the groundwater basin, and a detailed description by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), of the efforts being undertaken in the basin or basins to eliminate the long-term overdraft condition.

(3) A detailed description and analysis of the amount and location of groundwater pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), for the past five years from any groundwater basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(4) A detailed description and analysis of the amount and location of groundwater that is projected to be pumped by the public water system, or the city or county if either is required to comply with this part pursuant to subdivision (b), from any basin from which the proposed project will be supplied. The description and analysis shall be based on information that is reasonably available, including, but not limited to, historic use records.

(5) An analysis of the sufficiency of the groundwater from the basin or basins from which the proposed project will be supplied to meet the projected water demand associated with the proposed project. A water supply assessment shall not be required to include the information required by this paragraph if the public water system determines, as part of the review required by paragraph (1), that the sufficiency of groundwater necessary to meet the initial and projected water demand associated with the project was addressed in the description and analysis required by subparagraph (D) of paragraph (4) of subdivision (b) of Section 10631.

El Segundo Water Supplier Overview

The City of El Segundo currently has two available water sources, both supplied by WBMWD: imported water from the SWP and the Colorado River, and recycled water for industrial use and landscaping irrigation.² WBMWD is a water wholesaler servicing 17 cities and unincorporated areas of Los Angeles County with imported drinking water. Additionally, WBMWD has more than 450 customer sites for recycled water for municipal, commercial, and industrial use. WBMWD's primary supply source is imported water from the Colorado River and SWP supplied from the Metropolitan Water District of Southern California (MWD), transported via MWD pipelines and aqueducts. WBMWD is the fourth-largest member agency of MWD and has a five-member Board of Directors, of which, two are elected to participate on the MWD Board of Directors (West Basin Municipal Water District 2020 UWMP).³ To diversify its water supply portfolio, WBMWD has developed local supplies of groundwater, recycled water, and brackish desalination. The City of El Segundo is completely dependent on WBMWD for its potable water and recycled water. More information regarding the City's water supplies can be found in the 2020 UWMPs for El Segundo, WBMWD and MWD.

² Risk Management Professionals. (2020). *City of El Segundo 2020 Urban Water Management Plan*.

https://wuedata.water.ca.gov/getfile?filename=/public%2Fuwmp_attachments%2F7228116691%2FEIsegundo.2020UWMP.FINAL.pdf

³ Water Systems Consulting, Inc. (June 28, 2021). *West Basin Municipal Water District 2020 Urban Water Management Plan*.

https://wuedata.water.ca.gov/getfile?filename=/public%2Fuwmp_attachments%2F1728223502%2FWBMWD%202020%20UWMP_Final_2021-06-30.pdf

Service Area Information & Population Projections

The City of El Segundo is situated in the Los Angeles Basin on the Pacific coast of California approximately 1.5 miles south of Los Angeles International airport. With over 50% of potable water used for industrial processes and 15% by the commercial and institutional sectors, only about a quarter of potable water is used by residential customers. Reclaimed or recycled water is used for landscape irrigation, park and school ground irrigation, industrial use, and for groundwater recharge. The City serves an estimated population of approximately 16,930⁴ and, as a result of this analysis, the service area population is estimated to be 23,180 by 2045.

Today, the City is almost built-out with several redevelopment projects in various stages of planning. Table 2 below presents the projected population used for this WSA in 5-year increments until the year 2045. The percent increase for the population growth is also shown. This WSA uses the population estimate published by the Department of Finance (DOF) for 2023 for the City of El Segundo as the baseline for the service area population. With all foreseeable future residential development included on this effort’s development list, this analysis developed an updated population projection through 2045. Population projections incorporate the City’s 2021-2029 Housing Element projections, which were not available at the time the City’s 2020 UWMP was developed. Note that individual new-development-project net new-population estimates evaluated in this WSA are presented in five-year increments later in this document in Table 6, after the individual new development projects are presented and described.

Table 2. El Segundo Current and Projected Population

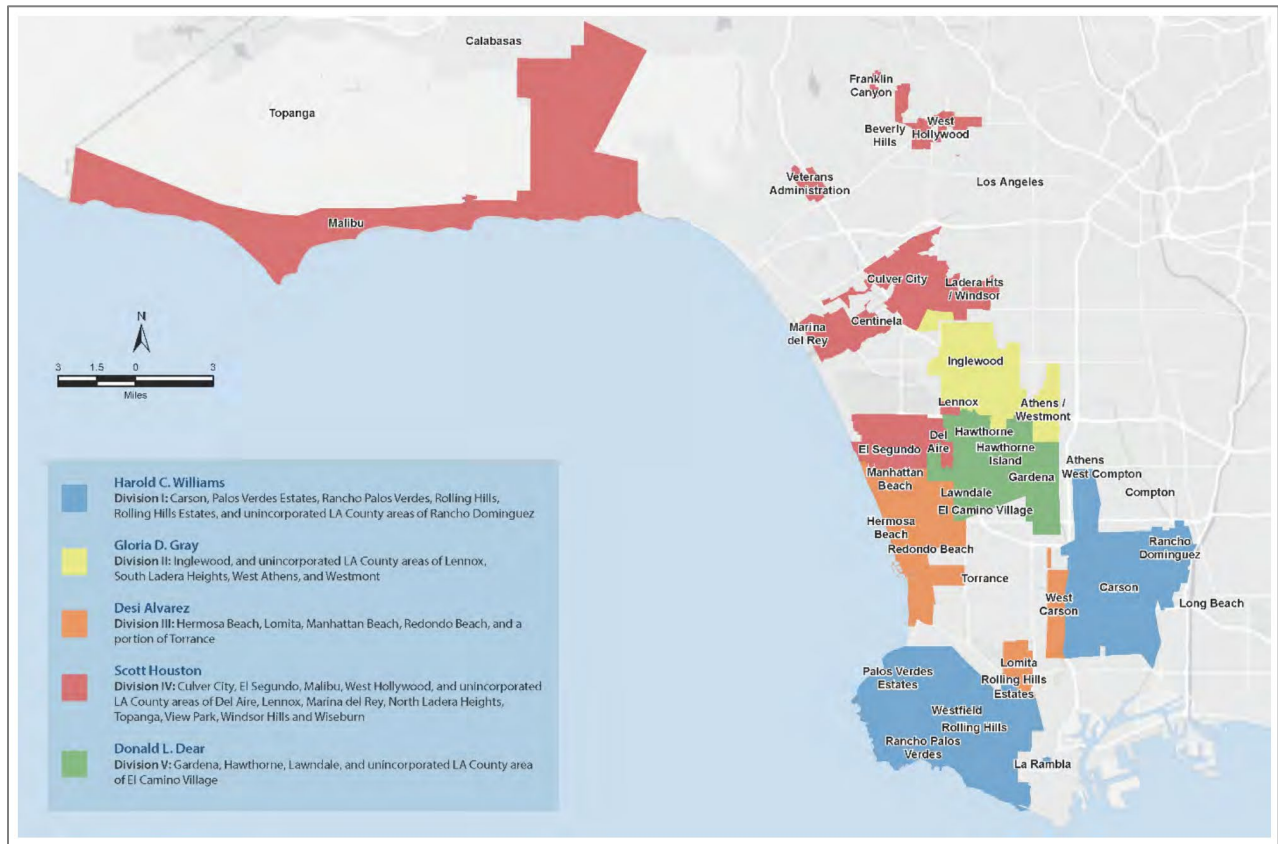
	2023 ¹	2025	2030	2035	2040	2045
Service Area Population²	16,930	18,100	21,240	23,180	23,180	23,180
% Average Annual Population Increase	N/A	3.4%	3.5%	1.8%	0%	0%

Notes:

1. 2023 actual population is based on the City of El Segundo’s State of California Department of Finance estimates as reported in Table E-4 Population Estimates for Cities, Counties, and the State, for years 2021-2023, with 2020 Census Benchmark. Published in Sacramento, California, May 2023.
2. Values have been rounded to the nearest ten people.

The following figure presents a map of the West Basin service area where the City of El Segundo service area is included in red.

⁴ State of California, Department of Finance. (May 2023). *E-4 Population Estimates for Cities, Counties, and the State, 2021-2023, with 2020 Census Benchmark*. Sacramento, California. https://dof.ca.gov/wp-content/uploads/sites/352/Forecasting/Demographics/Documents/E-4_2023_InternetVersion.xlsx



Source: West Basin Municipal Water District 2020 UWMP

Figure 3. West Basin MWD Service Area Map including City of El Segundo Water Service Area

Supply Source and Contractual Provisions

El Segundo has groundwater pumping rights to 953 acre-feet-per-year (AFY) from the adjudicated West Coast Basin that it leases to the Golden State Water Company (El Segundo 2020 UWMP). The City does not plan to use groundwater as a water supply and is entirely dependent on the WBMWD for its potable and recycled water.⁵ WBMWD’s main water supplier is MWD, which has a legal entitlement to water from the Colorado River under a permanent contract with the United States Secretary of the Interior.⁶ It is one of 29 agencies with a long-term SWP contract with the Department of Water Resources, which operates the SWP.⁷ The member agencies of Metropolitan (of which WBMWD is one) are not required to purchase water from MWD⁸. Yet, as imported water from MWD comprises 57% of WBMWD’s water supply portfolio⁹, WBMWD’s supply reliability is affected by MWD’s ability to secure water imports. However, due to supply reliability investments on MWD’s part, MWD projects to have sufficient supplies for WBMWD’s projected demands in single dry and multiple dry years.¹⁰ Additionally, WBMWD’s conservation measures and diversification of supplies (through developing local recycled water supplies among other efforts), also increase its supply reliability and ability to meet projected demands.¹¹ West Basin does not anticipate shortages and its service area demands are assumed to be unconstrained in reliability scenarios since Metropolitan projects sufficient supplies to meet West Basin’s demands in single dry

⁵ Risk Management Professionals. (2020). *City of El Segundo 2020 UWMP*.

⁶ Water Systems Consulting, Inc. (June 28, 2021). *WBMWD 2020 UWMP*.

⁷ Water Systems Consulting, Inc. (June 28, 2021). *WBMWD 2020 UWMP*.

⁸ https://bondlink-cdn.com/2089/2022_MetropolitanWaterDistrictSouthernCalifornia_SeriesC_OS.eT60sXRaN.pdf

⁹ <https://www.westbasin.org/wp-content/uploads/2021/08/07-22-21-Imported-Water-Fact-Sheet.pdf>

¹⁰ Water Systems Consulting, Inc. (June 28, 2021). *WBMWD 2020 UWMP*.

¹¹ Water Systems Consulting, Inc. (June 28, 2021). *WBMWD 2020 UWMP*.

year or multiple dry year scenarios (WBMWD 2020 UWMP). Similarly, WBMWD projects to be able to meet the City of El Segundo’s projected demands in single dry year and multiple dry year scenarios.¹²

Emergency Connections

In addition to El Segundo’s available water supply sources, there are four interconnections with three neighboring water agencies that can be activated during emergency situations: Los Angeles Department of Water and Power (LADWP), City of Manhattan Beach, and California Water Service. As published in the El Segundo 2020 UWMP Table 3.1.2: Import Capacity, Figure 4 presents the City’s emergency connections.

Table 3.1.2: Import Capacity

WEST BASIN MUNICIPAL WATER DISTRICT		EMERGENCY CONNECTIONS
CONNECTION	CAPACITY	
West Basin #3 MWD	40 CFS	LADWP (Imperial Ave. and Sheldon)
		LADWP (Imperial Highway and Nash)
West Basin #28 MWD	160 CFS	West Basin #3 Interconnection with Manhattan Beach
Total Capacity	200 CFS	California Water Service

Figure 4. El Segundo Emergency Connections

In a catastrophic event that prevents the City from obtaining water for distribution, WBMWD implements actions and methods to continue supplying water to customers of its member agencies. Water reserves are available to MWD through Diamond Valley Lake, as well as other surface reservoirs and it is estimated that MWD could provide a full supply for up to six months for all of its service areas following a catastrophic event. In addition, methods to ensure that water is continually supplied to customers include stockpiling emergency pipeline repair materials and coordinating with the California Governor’s Office of Emergency Services (Cal OES) and the County’s Operations Area in the event of a disruption in water supply.

If a major earthquake or other catastrophic incident caused a regional power outage and a natural gas line break, but the water distribution lines were still intact, the City would be able to provide water to its customers and its emergency interties (i.e. LADWP, City of Manhattan Beach, and the California Water Service Company). Water Division operations personnel can change valve positions and directly operate the water system from MWD’s water pressure. The City is adequately prepared in the event of a regional power outage. In addition, to ensure the imported water supply is made available, MWD has backup generation at its facilities as well as the ability to employ gravitational flow from regional reservoirs such as Lake Mathews, Castaic Lake, and Silverwood Lake. Mobile generators are also available as needed.

El Segundo Water Supply Projections

The WBMWD has the capacity to meet the potable and recycled water demands of all its customers in wet and normal years. WBMWD reports sufficient supply reliability, including no demand or supply reduction in dry years, as compared to normal year demands and supplies.

As presented in Figure 5 and reported in the WBMWD 2020 UWMP Table 7-2W-Normal Year Supply and Demand Comparison, and Table 7-1. Multiple Dry Years Supply and Demand Comparison (DWR Table 7-4W), in 2025 WBMWD can provide 146,190 AFY total supply assurance to all WBMWD member agencies, meeting their normal year demand estimates as well as their multiple dry year demands. Going forward, as reported in the WBMWD 2020 UWMP, by 2045 WBMWD reports it will be able to provide 165,760 AFY total supply assurance to all WBMWD member

7-2W | Normal Year Supply and Demand Comparison

	2025	2030	2035	2040	2045
Supply Totals From Table 6-9W	146,190	150,160	160,450	165,660	165,760
Demand Totals From Table 4-3W	146,190	150,160	160,450	165,660	165,760
Difference:	0	0	0	0	0

Figure 5. Supply Availability During Normal Years for Base Years 2025 through 2045 for West Basin Member Agencies

¹² Risk Management Professionals. (2020). *City of El Segundo 2020 UWMP*.

agencies, again meeting their normal year demand estimates as well as their estimated multiple dry-year demands.¹³

El Segundo Water Supply Shortage Contingency Plan

The Urban Water Management Planning Act requires all California urban water retailers supplying water to more than 3,000 customers, or supplying more than 3,000 AFY of water, to adopt a WSCP as part of the UWMP. The objective of this legislation is to prompt every water agency to plan for droughts and to prepare a series of responses based upon the severity and length of drought. Per Water Code Section 10632 (a)(3)(A), El Segundo must include six standard water shortage levels that represent shortages from the normal reliability as determined in the Annual Assessment. The shortage levels have been standardized to provide a consistent regional and statewide approach to conveying the relative severity of water supply shortage conditions. The six standard water shortage levels correspond to progressively increasing estimated shortage conditions (up to 10, 20, 30, 40, 50, and greater than 50% shortage compared to the normal reliability condition) and align with the response actions El Segundo would implement to meet the severity of the impending shortages.

Figure 6, excerpted from Table 7-1. Multiple Dry Years Supply and Demand Comparison (DWR Table 7-4W) from WBMWD’s 2020 UWMP, demonstrates the 100% supply availability during dry years for base years 2025 through 2045 for all WBMWD retailers, including the City of El Segundo. See the El Segundo 2020 UWMP for customer category breakdowns and water shortage policies for each customer class.

West Basin Municipal Water District June 2021		7-13		2020 Urban Water Management Plan Final		
Water Service Reliability and Drought Risk Assessment						Section 7
Table 7-1. Multiple-Dry Years Supply and Demand Comparison (DWR Table 7-4W)						
		2025	2030	2035	2040	2045
First Year	Supply Totals	146,190	150,160	160,450	165,660	165,760
	Demand Totals	146,190	150,160	160,450	165,660	165,760
	DIFFERENCE:	0	0	0	0	0
Second Year	Supply Totals	146,190	150,160	160,450	165,660	165,760
	Demand Totals	146,190	150,160	160,450	165,660	165,760
	DIFFERENCE:	0	0	0	0	0
Third Year	Supply Totals	146,190	150,160	160,450	165,660	165,760
	Demand Totals	146,190	150,160	160,450	165,660	165,760
	DIFFERENCE:	0	0	0	0	0
Fourth Year	Supply Totals	146,190	150,160	160,450	165,660	165,760
	Demand Totals	146,190	150,160	160,450	165,660	165,760
	DIFFERENCE:	0	0	0	0	0
Fifth Year	Supply Totals	146,190	150,160	160,450	165,660	165,760
	Demand Totals	146,190	150,160	160,450	165,660	165,760
	DIFFERENCE:	0	0	0	0	0

Figure 6. Supply Availability During Dry Years for Base Years 2025 through 2045 for West Basin Member Agencies

¹³ Water Systems Consulting, Inc. (June 28, 2021). *WBMWD 2020 UWMP*.

Water Demand Projections

10910. (c) (1) The city or county, at the time it makes the determination required under Section 21080.1 of the Public Resources Code, shall request each public water system identified pursuant to subdivision (b) to determine whether the projected water demand associated with a proposed project was included as part of the most recently adopted urban water management plan adopted pursuant to Part 2.6 (commencing with Section 10610).

(2) If the projected water demand associated with the proposed project was accounted for in the most recently adopted urban water management plan, the public water system may incorporate the requested information from the urban water management plan in preparing the elements of the assessment required to comply with subdivisions (d), (e), (f), and (g).

(3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system's total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system's existing and planned future uses, including agricultural and manufacturing uses.

(4) If the city or county is required to comply with this part pursuant to subdivision (b), the water supply assessment for the project shall include a discussion with regard to whether the total projected water supplies, determined to be available by the city or county for the project during normal, single dry, and multiple dry water years during a 20-year projection, will meet the projected water demand associated with the proposed project, in addition to existing and planned future uses, including agricultural and manufacturing uses.

This section presents projected demands for the City's service area based on an analysis of the DSP Update, Housing Element, and all existing and additional planned future uses in the service area. In some cases, values are rounded to the nearest single digit and totals may not align due to rounding.

Future El Segundo Demand Projections

Per City direction, this WSA assumes the City's average 2018 and 2019 potable water use for baseline 2023 potable water use. This period was selected because the following three years each presented unique challenges: 2020 demand was affected by COVID-19 pandemic shut-downs and work-from-home trends; 2021 demand was affected by a sewer spill requiring supplemental potable water use in the recycled water system; and year 2022 demand was affected by drought restrictions. Using the higher average 2018 and 2019 consumption volume to establish the year 2023 baseline demand, accounts for some drought rebound. That drought rebound is expected following the lower year 2022 potable demand consumption. Due to the City's 2020 UWMP having reported 'no growth in demand,' this baseline demand assumes no growth volume through the year 2045 and assumes no adjustment due to active or passive savings; again, being consistent with what the City's 2020 UWMP reported.

The El Segundo 2020 UWMP did not have the 2021-2029 Housing Element development and all the units it includes to meet the Regional Housing Needs Assessment (RHNA) requirements are available to include in its demand projection. This WSA's demand with projected development projects accounts for this growth and estimates net added population and demand for the Housing Element.

Recycled water consumption is based on reported use per the El Segundo 2020 UWMP Table 4.1.9: Total Water Demands. This analysis assumes no change in recycled demand between 2040 and 2045; the 2020 UWMP only reports demands through the year 2040. Based on El Segundo's 2020 UWMP Table 7.2.1: Bases of Water Year Data, it appears that recycled water supplies do not decrease in dry years as compared to normal year types. However, per the El Segundo 2020 UWMP service area recycled water demand is expected to decrease in normal year conditions between 2020 and 2040. Again, this recycled water demand decline is presented in the El Segundo 2020 UWMP Table 4.1.9: Total Water Demands.

Table 3 shows the future system demand projections without additional development and the difference (excess supply allocation) until 2045. This table presents system demand projections using the estimated baseline demand, as explained previously, and assumes no growth in accounts in the El Segundo service area. As shown, available supplies are sufficient to meet system demand projections in a normal year. Per the El Segundo 2020 UWMP, the WBMWD 2020 UWMP, and additional personal communication with WBMWD and City staff, WBMWD is prepared to supply all water demands for the City; any differences in 2020 UWMP published supply volumes and City of El Segundo estimated demand represents additional water purchases from WBMWD rather than an inability to meet water demands. Therefore, the normal year supply assurance is equal to the demand

value. Despite potable demand (without additional projects) remaining static at estimated baseline year 2023 levels, since total projected recycled water demand is estimated to decrease between 2020 and 2040 (according to the El Segundo 2020 UWMP), total future system demand projection (without additional development) is expected to decrease.

Table 3. Future System Demand Projections (Without Additional Development)

	2020	2025	2030	2035	2040	2045
Normal Year Supply Assured, AFY	14,456	15,015	14,223	13,520	12,883	12,883
Normal Year Demand Projections, AFY	14,456	15,015	14,223	13,520	12,883	12,883
Annual Normal Year Excess, AFY	0	0	0	0	0	0
Percent Excess in Normal Year	0%	0%	0%	0%	0%	0%

Notes:

1. In some cases, values are rounded to the nearest single digit and totals may not align due to rounding.
2. 2020 demand is based on actual potable and recycled water use as reported in the 2020 UWMP.
3. 2025 through 2045 potable demand assumes 2018 and 2019 average imported water (demand) represents annual start year 2023 potable water use. Potable water use assumes no growth in baseline demand and no active nor passive savings; this is consistent with what the 2020 UWMP reported. Recycled water projections are based on 2020 UWMP Table 4.1.9: Total Water Demands recycled water estimates. Assumes no change in baseline potable demand from 2023 to 2045; and no change in recycled demand between 2040 and 2045.
4. Normal year supply with no additional projects will equal the normal year demand with no additional projects. There will be no excess/surplus or shortfall per WBMWD direction.

El Segundo Water Demand Management

Though not included in baseline demand projections as explained previously, it is anticipated that the El Segundo service area will attain passive savings naturally over the projection period and achieve active conservation savings on an ongoing basis and as needed in dry years as part of its water conservation initiatives.

Passive savings refers to water savings resulting from actions and activities that do not depend on direct financial assistance or educational programs implemented by water suppliers. In El Segundo Table 3, there were no new developments assumed, so any water savings will be primarily from the natural replacement of existing plumbing fixtures with water-efficient models required under current plumbing code standards, the installation of water-efficient fixtures and equipment retrofits in existing buildings as required under CALGreen Building Code Standards, and inclusion of low-water use landscaping and high-efficiency irrigation systems to minimize outdoor water use in new connections and developments in accordance with the state’s Model Water Efficient Landscape Ordinance (MWELO). Active savings refers to the savings that result from implementing conservation measures. El Segundo’s active conservation measures, as reported on their website as of July 2023, are presented in Table 4. The City is a partner with the WBMWD and is part of the MWD Water Use Efficiency Programs. In an effort to help Californians conserve water, the WBMWD is offering a number of water conservation rebates that are eligible for City of El Segundo customer participation.

Table 4. El Segundo Water Demand Management Measures^{1,2}

Measure Name	Description
Grass Replacement Rebates¹	A rebate of \$3 per square foot of grass removed from residential and commercial landscapes is currently offered.
Public Agency: Grass Replacement Rebate¹	Rebates starting at \$4 per square foot are available for public agencies in the service area to remove non-essential grass on public property.
Grass Replacement +¹	The Grass Replacement + program offers residents in priority, eligible neighborhoods a free custom landscape design, a free drought-tolerant tree and additional assistance in applying for a rebate of \$5 for every square foot of grass replaced with a drought-friendly garden.
Grass Removal and Garden Transformation Workshops¹	These BeWaterWise.com workshops are offered multiple times per month to teach residents how to transform heavy-water-using grass lawns into climate-appropriate water efficient gardens.
Rain Barrels¹	Free rain barrels are available to service area residents to capture rain, prevent runoff, reduce water use, and satisfy the stormwater capture requirement for the grass replacement rebate program.
SoCal Gas Partner Program¹	Southern California Gas Co. is partnering with WBMWD to offer \$150,000 in water and energy efficiency upgrades at no cost for 100 eligible families within priority communities (including the El Segundo service area).
Commercial Sector Water Use Efficiency¹	In 2023 WBMWD began a new CII water-efficiency program that meets the specific needs of the service area, reduces demand, and helps El Segundo meet CA state performance measures.
Water Waste Ordinances²	The City adopted water conservation measures by Ordinance Numbers 1433 and 1437. Ordinance No. 1433 added enforcement actions to the formerly adopted ordinance and was adopted on November 3, 2009. Ordinance No. 1437 addresses water conservation in landscaping and was adopted on December 15, 2009. To enforce these two ordinances, the City will issue warnings and subsequent citations to customers exceeding the conservation constraints.
Conservation Pricing²	The City has a tiered rate structure in place to encourage water conservation. Additionally, the City has a service charge that is calculated by meter size and usage for all customer sectors, billed either monthly or bi-monthly. The tiered water rates were updated in the 2004 Ordinance 1376, which also states that potable water consumption charges will be increased by the same percentage as WBMWD increases its charges to the City.
Public Education & Outreach²	The City utilizes several methods to promote water conservation and resource efficiency including bill inserts, newsletters, brochures, demonstration gardens, special events, media outreach, events, programs to coordinate with other government agencies, and coordination with industry and public interest groups and media.
Water Loss Management²	On average, City Water Division crews survey approximately 60 miles of main and lateral pipelines per year. Line replacements are made based on a number of factors: a history of leaks in a particular line over a number of years; flow, or lack thereof, as calculated by flow testing the line; and sizing. If a leak is detected, City Water Division personnel repair the leak in a timely manner.
Water Conservation Coordination & Staffing Support²	The City's water conservation coordinator is a function performed mainly by the Water Supervisor, who maintains American Water Works Association (AWWA) conservation certification, working in conjunction with WBMWD. The conservation coordinator also implements residential water audits at the request of customers.

Notes:

1. El Segundo and West Basin Water Conservation Rebate Programs webpages, accessed July 2023:

<https://www.westbasin.org/conservation-3/>

2. Risk Management Professionals *2020 Urban Water Management Plan for City of El Segundo*, 9 Demand Management Measures.

Development Project Descriptions and Net Demand Projections

This section presents background and demand calculation information for the DSP Update and existing and future planned developments in the City of El Segundo service area. The City has completed the WSA based on available water use data from completed developments (where available) and the land uses proposed for the developments discussed in the following section. Some of the projects analyzed for this WSA are underway and have projected water demands published in documentation such as Environmental Impact Reports (EIRs). In cases where a project had a water demand projection included as part of a previously adopted EIR, that demand projection was used in this WSA.

Demand Factors for Net Added Water Demand Calculations

For projects that did not have published water demand projections as explained previously, the following demand factors were used in conjunction with planned area estimates for the different uses proposed for each development project.

Nonresidential Demand Factors

For nonresidential development in the El Segundo service area, with projected demands not already estimated in an adopted EIR, demand factors from the “Castaic Lake Water Agency (CLWA) Commercial Demand Factor Study” (published in 2016 by Santa Clarita Valley Water District [SCV], formerly CLWA, and Maddaus Water Management) were used.¹⁴ The SCV Commercial Demand Factor Study assessed CII water use demand factors used by other utilities and streamlined and/or averaged values presented in other more regional comprehensive studies including: City of Redwood City, City of Mountain View, City of San Bernardino Municipal Water Department, City of Santa Barbara, City of West Hollywood, Marina Coast Water District, Napa Sanitation District, Santa Clarita Valley Sanitation District, and the American Water Works Association’s (AWWA) Commercial and Institutional End Uses of Water Study, which itself is based on data obtained from Irvine Ranch Water District, San Diego Water, Santa Monica Water Department, Phoenix Water Services, Los Angeles Department of Water and Power, San Diego County Water Authority, and Metropolitan Water District of Southern California.¹⁵ The SCV Commercial Demand Factor Study also analyzed 5 years of water use data for approximately 500 active SCV service area commercial accounts against their building square footages and more specific land use and water use categories.

These nonresidential demand factors recommended in the SCV Commercial Demand Factor Study were multiplied by El Segundo’s various planned estimated areas of matching proposed uses to yield a projected demand estimate. The nonresidential demand factors used to calculate projected demand for applicable project end uses are listed as follows:

- Retail space - 40.54 gallons per year per square foot (gpy/sqft)
- Office space - 38.72 gpy/sqft
- Medical office space - 39.45 gpy/sqft
- Sit-down restaurant space - 250.93 gpy/sqft
- Fast-food space - 349.18 gpy/sqft

Residential Demand Factors

For residential development demand estimates not included in previously adopted EIRs, people per household (PPH) and indoor water use estimates were employed. An average household size of 2.535 people was assumed for all residential units, except the smaller accessory dwelling units (ADUs), which assumed 1.5 PPH. This value is based on the average household size of renter-occupied and owner-occupied units in El Segundo per the U.S.

¹⁴Maddaus Water Management and Western Policy Research. (March 4, 2016). *SCV Demand Study Update: Land-Use Based Demand Forecast Analysis*. https://www.yourscvwater.com/sites/default/files/SCVWA/your-water/watershed-planning/water-supply-assessments/MWM-2016_SCV-Demand-Study-Update_Land-Use-Based-Demand-Forecast_Tech-Memo-2.pdf

¹⁵ Dziegielewski, B., Kiefer, J., Opitz, E., Porter, G., Lantz, G., DeOreo, W. Mayer, P. Nelson, J. American Water Works Association Research Foundation. (2000). *Commercial End Uses of Water*. <https://www.waterrf.org/resource/commercial-and-institutional-end-uses-water-0>

Census Bureau’s Five-Year American Community Survey (ACS) 2020 estimate from Table DPO4 – “Selected Housing Characteristics”. Net added population was calculated using the 2.535 people per household factor against the estimated net added number of residential units and then multiplied by an indoor water use factor of 42 gallons per capita per day (GPCD) to yield net water demand for residential development. This residential indoor demand factor assumes that residential units will be built to the current amended SB 1157 and joint DWR and SWRCB’s year 2030 indoor water use recommendation of 42 GPCD. Residential outdoor water use was estimated based on the area and types of plantings planned for each development site. The outdoor use water demand projection was based on local climate factors with an average regional reference evapotranspiration (ET_o) of 48 inches per year based on Santa Monica CIMIS station 99.¹⁶ For turf, an irrigation efficiency factor of 65% and a plant factor of 0.7 was assumed. For drought adapted plants, an irrigation efficiency factor of 85% and a plant factor of 0.4 was assumed. For native plants, an irrigation efficiency factor of 85% and a plant factor of 0.1 was assumed. The evapotranspiration rate provides the number of inches of water needed to irrigate each planting type in inches of water per year. For each type of planting, the evapotranspiration rate was multiplied by the square footage of plantings and the irrigation efficiency factor to get total estimated water use for that type of planting. The water demands for the different types of plantings (for a project site) were added to derive a total water demand for the landscaping area specific to each development project.

Project Descriptions and Net Added Water Demand from Additional Projects

This section presents a brief description of every future development project in the El Segundo service area and each project’s net added water demand. The process of estimating net water demand for development project sites is dynamic, and by the next WSA submittal there will be more actual site data available under normal-year conditions and with the new-normal impacts of the recent/ongoing pandemic. Net demand takes into account existing site water use including buildings that will be demolished and/or landscapes that will be converted.

Downtown Specific Plan Update

As mentioned in earlier sections of this WSA, the DSP Update will revise the existing Specific Plan planning districts, include public improvements, development standards, mobility and infrastructure improvements, and an implementation plan among other key enhancements. The project will result in an additional 65,000 square feet of retail space, 65,000 square feet of restaurant space, 200,000 square feet of office space, 24,000 square feet of medical office space, and 300 multi-family residential units. It is expected that the project will be 50% built and online between 2025 and 2029 and 100% built and online between 2030 and 2035. There was no demolition to account for in calculating net added water demand for this project based on the information provided by El Segundo staff. Additionally, from stipulations in the draft Specific Plan, there will be 3,357 square feet of landscaping on site. The landscape area was estimated to be 25% turf area, 50% drought adapted plants, and 25% native plants (based on input from El Segundo staff). The water demand projections for the different uses stated above, ranging from retail space to landscaping area, were calculated using the demand factors and assumptions listed in the previous demand factor section. A projected total net water demand of **121 acre feet per year (AFY)** is estimated for the Downtown Specific Plan Update.

Housing Element

Though the 2021-2029 Housing Element is included as one of the projects in this WSA, having future water demand and requiring future water supplies, it is not one specific development project, but rather a policy document that provides guidance and sets standards for several areas of mandatory environmental review for later “projects” that would be undertaken by local government and the private sector. El Segundo has determined that the 2021-2029 Housing Element is a “project” subject to CEQA and is therefore preparing a program-level EIR. A WSA is required for “projects” as defined by Water Code Section 10912 that are subject to CEQA. Water Code Section 10912(7) reasonably applies because it describes future anticipated development: “A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.” Future development projects facilitated by the 2021-2029 Housing Element arguably fall within this definition. Additionally, because the 2021-2029 Housing Element is a “project” subject to CEQA per

¹⁶ California, State of. “CIMIS.” California Irrigation Management Information System, cimis.water.ca.gov/. Accessed June 2023.

CEQA Guidelines Section 15155, and because Water Code Section 10910 generally requires an evaluation of a 20-year water supply for a project be included in the EIR, it has been included in this WSA effort.

The Housing Element¹⁷ of El Segundo's General Plan accounts for development between 2021 through 2029 and delineates the City's strategy to enhance the community's residential character, expand housing opportunities for economic segments, and provide direction for local government decision-making in matters relating to housing. Though the City of El Segundo's Housing Element accounts for development between October 15, 2021 and October 15, 2029, only net commercial development and net population after 2023 is considered in this WSA project since the WSA's estimated year 2023 service area water use includes the water use of any Housing Element development between Oct 15, 2021 and 2023.

The Housing Element proposes an additional 1,912 multi-family residential units and 64,077 square feet of net added retail space. Some of this proposed development is identified and tracked as unique projects in this WSA, and so those units and retail areas are not included in this project's estimates. Overlapping development elements originally included in El Segundo's Housing Element but NOT included in the Housing Element projected water use estimate (because they occurred before 2023 or are tracked uniquely) in this WSA are as follows:

- 16 ADUs built between Oct 15, 2021, and December 2022
- 201-209 Richmond St (EA 1299) project which includes 3,307 square feet of retail space and 9,450 square feet of office space (this project is tracked uniquely in this WSA analysis)
- Stick n Stein mixed use (EA 1325) project which includes 50 apartment units and over 14,000 square feet of commercial retail space (this project is tracked uniquely in this WSA analysis)

No demolition was accounted for in water demand projection estimates for the Housing Element in this WSA as the unit values provided by City staff were net unit values and any demolition of water using structures was considered in these values. It was assumed that there would be no net added outdoor water use as nearly 100% of the Housing Element's projected development will replace existing development, and setback requirements will be reduced substantially (less open space on the same sites to landscape). Furthermore, the existing landscaping on the properties will be replaced by more drought tolerant plants. Using the demand factors and calculations described in the previous demand factor section, the total net projected water demand for the non-overlapping pieces of the Housing Element is estimated to be approximately **228 AFY**.

Pacific Coast Commons Specific Plan

The Pacific Coast Commons Specific Plan (PCC Specific Plan), which was adopted in 2022, assigned a new General Plan Land Use Designation to approximately 6.38 gross acres of developed property along Pacific Coast Highway. The PCC Specific Plan allows for up to 263 new housing units and 11,252 square feet of commercial/retail space to be developed, along with three parking garages. It is expected that this project will be fully built and online between 2025 and 2029. The projected water demand for buildings, as published in the Environmental Impact Report prepared for this project, is 54.2 AFY.¹⁸ As a supplement to the EIR for this project, and to include outdoor water use, an additional potable demand for 16,500 square feet of landscaping is estimated. Assuming 5% of this area will be turf and 95 % drought tolerant plants, an additional landscape water use of 0.7 AFY is projected. In total, the projected water demand for this project is approximately **55 AFY**.

South Campus (Raytheon) Specific Plan

The South Campus (Raytheon) Specific Plan project is expected to be fully developed by 2035 with some portions completed by 2025 and others developed later. This project includes the Nash Street Exchange (A and B) project and the Chargers Training Facility and Headquarters project. The South Campus (Raytheon) Specific Plan had an

¹⁷ El Segundo, City of. (November 2022). *Housing Element Update 2021-2029 and Affordable Housing Strategy*. <https://www.elsegundo.org/government/departments/community-development/planning-division/housing-element-update-2021-2029>. Accessed July 2023.

¹⁸ Pacific Coast Commons Specific Plan. Draft Environmental Impact Report. State Clearinghouse No. 2020050508, prepared by Dudek. February 2021.

EIR completed in 2015, and an addendum to the EIR was written in 2021.^{19 20} The addendum stated the initially approved AFY for the South Campus Specific Plan was 457.3 AFY and corrected the estimate for the Chargers training facility project floor space, as the addendum found that the project would require 58% less gross floor space than initially planned. It also reported the new projected demand for the Chargers training facility would be approximately 29 AFY. Using this information, MWM adjusted the total projected demand for the South Campus Specific Plan; the revised projected demand is estimated to be approximately **418 AFY**.

The remaining development of the South Campus Specific Plan (excluding the Nash Street Exchange project and the Chargers training facility project which are expected to be completed by 2025), is expected to be 50% completed and online between 2025 and 2029, and fully completed and online by 2035. It proposes 126,310 square feet of retail and restaurant space, 1,547,407 square feet of office space, and 259,840 square feet of light industrial/warehouse space (in addition to the Nash Street Exchange project and the Chargers training facility project). The estimate of 418 AFY total includes the two developments coming online in 2025, the Nash Street Exchange (A and B) development project at 2100-2198 E El Segundo Boulevard, and the Chargers Training Facility and Headquarters project at 2100 E El Segundo Boulevard.

Part A of the Nash Street Exchange project adds 43,000 square feet of medical office space and sit-down restaurants of 12,100 square feet and 7,050 square feet of fast-food restaurants. Part B proposes 3,500 square feet of fast-food restaurant space for a Starbucks café. A total of 49,623 square feet of landscaping (100% drought adapted plants) is proposed for Nash Street Exchange parts A and B combined. Landscaping demand is expected to be serviced by recycled water and was calculated using the demand factors and calculations described in the previous demand factors section. The projected potable water demand for this project was calculated by finding the percentage of the total South Campus (Raytheon) Specific Plan square footage that the Nash Street Exchange project comprises, and then apportioning that same percentage from projected demand for the entire South Campus (Raytheon) Specific Plan (418 AFY). As the Nash Street Exchange project makes up approximately 3% of the total square footage of the Raytheon Specific Plan, the projected demand for this project was estimated to be approximately **13 AFY**. It is expected that this development will be completed and occupied by 2025.

The Chargers Training Facility and Headquarters project adds 143,250 square feet of corporate offices and team training facility space. Landscaping for this project would involve 40,814 square feet of drought tolerant plants and 197,652 square feet of lawn for sports fields. Using the demand factors and calculations described in the previous demand factors section, projected irrigation demand for this project was estimated to be approximately **21 AFY**. As mentioned earlier, the projected potable demand for this project was estimated to be approximately **29 AFY** by and addendum to the South Campus (Raytheon) Specific Plan. The project is under construction as of 2023, and it is expected the project will be completed by 2025.

Stick n Stein Mixed Use (EA 1325)

The Stick n Stein Mixed Use development project includes plans for 50 apartment units to be constructed over 14,000 square feet of commercial retail space. As mentioned in the Housing Element project description, this development overlaps the Housing Element's total targeted development, and was not included in the Housing Element net demand projection estimate. The Stick n Stein development is planned to be fully built and occupied between 2025 and 2029. Although this project includes the demolition of a restaurant building, it was assumed that there is no reduction of existing site water use since the restaurant building on site has been vacant for several years (and therefore any water use is not included in the baseline service area demand). Additionally, there was no estimated net added landscaping or outdoor water use accounted for as part of this project. Using the demand factors mentioned in the previous section, this project's net water demand is projected to be approximately **7.71 AAFY** to be fully online by 2030.

¹⁹ Environmental Impact Report. El Segundo South Campus Specific Plan (EA 905). January 2015.

²⁰ Professional Sports Headquarters and Training Facility Project. Addendum to the Raytheon El Segundo South Campus Specific Plan Project. Certified Final Environmental Impact Report (SCH No. 2012101081). November 2021.

201-209 Richmond St (EA 1299)

This project seeks to develop four multi-family residential units, 3,307 square feet of retail space, 9,450 square feet of office space, and 100 square feet of landscaping (100% drought adapted plants). This project overlaps with the Housing Element and therefore is not included in the net projected demand of the Housing Element in this WSA. This project is expected to be completed and online between 2025 and 2029. The net projected demand for this project is approximately **2.02 AFY** and was calculated using the demand factors and calculations described in the previous demand factor section.

Beach Cities Media Campus Phase 1 and 2 Office Campus (EA 1339)

The Beach Cities Media Campus project includes the development of a 240,000 square foot office building, a 66,000 square foot building for studio and production facilities, and 7,000 square feet of retail space divided among two one-story structures. The “Proposed Beach Cities Media Campus Project Draft Environmental Impact Report State Clearinghouse No.: 2017121035” prepared by EcoTierra Consulting projected that water demand for this project will be approximately **59 AFY**. This project is scheduled to be completed and fully online between 2025 and 2029.

650-700 N PCH Office (EA 1289)

The 650-700 N PCH Office project seeks to develop 122,156 square feet of office space in a seven-story building, a 1,185-space parking structure, and an addition of 38,731 square feet of new landscaping area (of which 2,284 square feet are for turf and the rest for drought adapted plants). The City’s “Water Conservation in Landscaping” regulations in Chapter 15A of the El Segundo Municipal Code (ESMC) permit this landscape planting profile.²¹ The project includes remodeling of existing office space with no existing water use, so projected demand was calculated for the 122,156 square feet of office space. The project is expected to be completely online between 2025 and 2029. Based on input from El Segundo staff, it was assumed that the parking structure in this project would not generate any demand. The projected net demand for this project was calculated using the demand factors and calculations in the previous demand factor section and was estimated to be approximately **16 AFY**.

1950-1960 E Grand Ave Office

The proposed 1950-1960 E Grand Ave Office project includes the construction of a five-story commercial office building (105,469 square feet), a 23-space surface parking lot, and a four-story parking structure. It is expected that this project will be constructed and completely occupied between 2025 and 2029. The "Draft Initial Study /Mitigated Negative Declaration 1950-1960 East Grand Avenue Project 1950 & 1960 East Grand Avenue EA 1291 projects a net water demand of approximately **17 AFY** for this project.²²

Smoky Hollow Specific Plan (partial)

The Smoky Hollow Specific Plan (SHSP) is comprised of 120 acres in the southern portion of the City, situated east of the downtown El Segundo Main Street Corridor. The SHSP supports numerous commercial, office, and light industrial uses. The SHSP area is bounded by Indiana Street and Pacific Coast Highway to the east, downtown El Segundo to the west, the Chevron refinery, and El Segundo Blvd to the south, and commercial and multi-family neighborhoods generally north of E. Franklin Avenue and Grand Avenue.

When it was approved in March 2018, the SHSP contained 329 parcels encompassing 94.3 net acres (not including street rights-of way) and was already developed with approximately 2.46 million square feet of building area mainly for industrial and office land uses. The SHSP estimated a development capacity of up to 2.97 million square feet of office, industrial, and public facility building space through 2040. This represents a net increase of 517,094 square feet of total building area for office, R&D, and commercial uses.

The SHSP 2018 EIR, the Smoky Hollow Specific Plan Amendment (SPA 21-01), and the Community Benefits Plan for the Standard Works Project report the net water demand for the entire SHSP will be 118 AFY. All SHSP

²¹ El Segundo, City of. (March, 2023). “Chapter 15A Water Conservation in Landscaping.” American Legal Publishing. https://codelibrary.amlegal.com/codes/elsegundoca/latest/elsegundo_ca/0-0-0-13161 . Accessed Aug. 2023.

²² Michael Baker International. (June 2022). *Draft Initial Study /Mitigated Negative Declaration 1950-1960 East Grand Avenue Project 1950 & 1960 East Grand Avenue EA 1291*. <https://www.elsegundo.org/home/showpublisheddocument/5799/637949452578700000>

estimated total allocated project demand is included in this WSA analysis. No SHSP projects came online with any substantial water use before this analysis' estimated 2020 start year. All site demolition and landscaping site demolition is accounted for in the net demand allocation reported in the SHSP 2018 EIR.

To better determine when, in the next 20 years, water demands from the SHSP will come online, the following list presents some of the projects included in the SHSP EIR water demand allocation.

- Standard Works Project, located on two adjacent sites within the SHSP area, with an estimated 13.4 AFY²³ demand coming online between 2025 and 2029. The North Site portion proposes a 45,568 SF addition to existing 19,493 SF, for a total of 65,061 SF for office uses. A new two-story 766 SF coffee kiosk building is also proposed. The South Site portion proposes 44,604 SF in addition to existing 19,311 SF, for a total of 63,915 SF for office uses. Both north and south sites will have the existing building structures preserved.
- 212 Eucalyptus (EA 1254) office building, with an area of 14,119 gross square feet, to be completed between 2020 and 2025. This project includes 800 square feet of new landscaping and the demolition of a 5,350 square-foot warehouse building. It is assumed half of this demand will come online between 2020 and 2025, and the remaining half between 2025 and 2030.
- 140 Sheldon St., an addition of 800 SF to an existing office building that was completed in 2020.
- 6 caretaker accessory dwelling units are projected to be online between 2030 and 2035. A PPH of 1.5 is assumed as these units are intended to be small, at around 500 square feet, and ancillary to office and/or industrial businesses in the Smoky Hollow neighborhood. This yields a residential population increase of about 10 people.

The following 140 Oregon Office Addition and 141 Eucalyptus Dr Office (EA 1292) projects are included in the Smoky Hollow Specific Plan area but tracked uniquely with a distinct demand in this WSA analysis effort. So, though they are part of the SHSP area, their demands are removed from the SHSP total estimated demand of 118 AFY to yield a SHSP (partial) demand of approximately **110 AFY**. This is the total SHSP 118 AFY allocation minus the 140 Oregon Office demand of 7 AFY and 141 Eucalyptus Drive Office demand of 1 AFY presented subsequently.

140 Oregon Office Addition

The 140 Oregon Office Addition project involves the addition of 57,675 square feet of office space to an existing building. Additionally, the project proposes 4,590 square feet of new landscaping (20% medium and 80% low water use plants). The project is near completion as of 2023 and is expected to be fully online by 2025. Using the demand factors and calculations described in the demand factor section above, a projected net demand of approximately **7.07 AFY** was estimated for the addition of office space in this project. This project includes the Smoky Hollow Specific Plan (SHSP) area but is tracked uniquely with a distinct demand in this WSA analysis effort.

141 Eucalyptus Dr Office (EA 1292)

The plans for the 141 Eucalyptus Dr. office project involve the development of 8,882 square feet of office building space for a law firm, a parking garage, and 1,039 square feet of low water use landscaping (100% drought adapted plants). It is expected that the water demand for the project will be fully online between 2025 and 2029. Based on input from El Segundo staff, it was assumed that the parking structure in this project would not generate any demand. Using the demand factors and calculations described in the demand factor section above, the projected net demand for this project was estimated to be approximately **1.09 AFY**. This project includes the Smoky Hollow Specific Plan area but is tracked uniquely with a distinct demand in this WSA analysis effort.

445 N Douglas – Data Center Phase 2

The 445 N Douglas – Data Center Phase 2 development is the second phase of a multi-phase data center project. It includes the development of 51,300 square feet of data center use space and conversion of 104,364 square feet of unused space to data center use. Phase 1 of this project has been occupied for approximately 10 years

²³ MIG Inc. (December 13, 2021). *Smoky Hollow Specific Plan Amendment (SPA21-01) and Community Benefit Plans for the Standard Works Project at 1320-1330 E. Franklin Avenue (CBP19-03) and 1475 E. El Segundo Boulevard (CBP19-02)*. Initial Study. <https://ceqanet.opr.ca.gov/2021120297>

and is comprised of a data center of 158,624 square feet with outdoor irrigation serviced by recycled water. No new landscaping demand was factored into the demand projection for Phase 2 as all the landscaping for the multi-phase data center project was done in Phase 1. As Phase 1 involves the same land use planned for Phase 2, historical indoor consumption data for Phase 1 was used as a basis to project water demand for the proposed 155,664 square feet of data center use space in Phase 2. The potable water use for Phase 1 from 2021 and 2022 was averaged to yield a data center use demand factor of 68.59 gpy/sqft. Data from 2021 and 2022 was used because these years represent the new normal indoor water use for the data center after COVID-19 shutdowns. Multiplying 68.59 gpy/sqft by the square footage proposed for Phase 2 resulted in an estimated projected water demand of approximately **33 AFY**. Construction for this project is expected to begin in 2024, and water demand for this development is projected to be fully online between 2025 and 2029.

2200 Grand Parking Structure and Office

The 2200 Grand Parking Structure and Office project proposes that 49,520 square feet of office space be developed after the demolition of 32,586 square feet of office space, as well as the addition of an 8-level parking structure (409,284 square feet). Net new office space proposed is 16,934 square feet. The project would also involve the addition of 13,600 square feet of low water use and 1,169 square feet of medium water use landscaping. From aerial images, it was estimated that approximately 17,405 square feet of existing landscaping would be demolished to install the proposed new landscaping. Using the demand factors and calculations described in the previous demand factors section, and assuming that the demolition of existing landscaping and installation of new plantings would result in net zero change in demand (to be conservative in projecting water demand for outdoor water use), projected net new water demand for this project was estimated to be approximately **2 AFY**. Based on input from El Segundo staff, it was assumed that the parking structure in this project would not generate any demand. This project is expected to be constructed and fully occupied between 2025 and 2029.

Project Net Added Water Demand & Population

The following table presents the total projected annual net new demand generated from the development projects evaluated in this WSA and described previously. Net new demand (as opposed to new development demand) considers existing site water use, including buildings that will be demolished or landscapes that will be converted. An estimated total system water loss is then apportioned to the resulting net demand volume from the new development.

Total system water loss is the sum of apparent and real losses. Apparent loss is associated with metering inaccuracies, billing, and administrative errors, authorized unmetered uses (e.g., system flushing and firefighting), and unauthorized uses. Real loss is associated with physical water lost through line breaks, leaks and seeps, and overflows of storage tanks. The non-revenue water values provided in El Segundo’s American Water Works Association (AWWA) validated water loss audits for years 2020 and 2021 are below the technical minimums MWM trusts of approximately 6% to 7%. From the AWWA water loss audits it appears that real water loss is approximately 1% to 2% less than non-revenue water in El Segundo. Considering these factors, this WSA applies an additional estimated system water loss of 4%. As of November 2023, it is estimated that approximately 2% of total service area net added demand by the year 2045 will be served by recycled water.

Table 5. Projected Annual Net New Demands (AFY)

Development Project	2025	2030	2035	2040	2045
Housing Element	57	171	228	228	228
Downtown Specific Plan Update	0	61	121	121	121
Pacific Coast Commons Specific Plan	0	55	55	55	55
South Campus (Raytheon) Specific Plan	64	253	441	441	441
Stick n Stein Mixed Use (EA 1325)	0	8	8	8	8
201-209 Richmond St (EA 1299)	0	2	2	2	2
Beach Cities Media Campus Phase 1 & 2 Office Campus (EA 1339)	0	59	59	59	59
650-700 N PCH Office (EA 1289)	0	16	16	16	16
1950-1960 E Grand Ave Office project	0	17	17	17	17

Development Project	2025	2030	2035	2040	2045
Smoky Hollow Specific Plan (partial)	1	15	63	110	110
140 Oregon Office Addition (EA 1233)	7	7	7	7	7
141 Eucalyptus Dr Office (EA 1292)	0	1	1	1	1
445 N Douglas – Data Center Phase 2	0	33	33	33	33
2200 Grand Parking Structure & Offices	0	2	2	2	2
Subtotal Developments	129	700	1,053	1,100	1,100
Estimated System Water Loss	5	28	42	44	44
Grand Total Net New Development Demand	134	728	1,095	1,144	1,144

Note: Net demand includes potable and recycled water demands.

The following table presents projected annual net new population estimates from the development projects evaluated in this WSA and described previously.

Table 6. Projected Annual Net New Population

Development Project	2025	2030	2035	2040	2045
Housing Element	1,168	3,503	4,670	4,670	4,670
Downtown Specific Plan Update	0	0	760	760	760
Pacific Coast Commons Specific Plan	0	670	670	670	670
South Campus (Raytheon) Specific Plan	0	0	0	0	0
Stick n Stein Mixed Use (EA 1325)	0	130	130	130	130
201-209 Richmond St (EA 1299)	0	10	10	10	10
Beach Cities Media Campus Phase 1 & 2 Office Campus (EA 1339)	0	0	0	0	0
650-700 N PCH Office (EA 1289)	0	0	0	0	0
1950-1960 E Grand Ave Office project	0	0	0	0	0
Smoky Hollow Specific Plan (partial)	0	0	9	9	9
140 Oregon Office Addition (EA 1233)	0	0	0	0	0
141 Eucalyptus Dr Office (EA 1292)	0	0	0	0	0
445 N Douglas – Data Center Phase 2	0	0	0	0	0
2200 Grand Parking Structure & Offices	0	0	0	0	0
Grand Total Net New Development Population	1,168	4,313	6,249	6,249	6,249

Note: Zero values represent either no residential development in the previous 5-years and/or a solely nonresidential development project.

Comparison of Supply and Demand

This section presents a comparison of El Segundo’s service area demands with the net demand of the new development projects presented with WBMWD’s supplies.

10910.(c)(3) If the projected water demand associated with the proposed project was not accounted for in the most recently adopted urban water management plan, or the public water system has no urban water management plan, the water supply assessment for the project shall include a discussion with regard to whether the public water system’s total projected water supplies available during normal, single dry, and multiple dry water years during a 20-year projection will meet the projected water demand associated with the proposed project, in addition to the public water system’s existing and planned future uses, including agricultural and manufacturing uses.

10911. (c) The city or county may include in any environmental document an evaluation of any information included in that environmental document provided pursuant to subdivision (b). The city or county shall determine, based on the entire record, whether projected water supplies will be sufficient to satisfy the demands of the project, in addition to existing and planned future uses. If the city or county determines that water supplies will not be sufficient, the city or county shall include that determination in its findings for the project.

Table 7 presents total system demand projected for El Segundo during normal conditions compared to El Segundo’s supply assurances. Per the El Segundo 2020 UWMP, the WBMWD 2020 UWMP and personal communication with WBMWD and City staff, WBMWD is prepared to provide all sufficient potable and recycled water supplies to meet water demands for El Segundo. Any differences in published supply volumes and projected demands demonstrate additional water purchases from WBMWD given their supply reliability (rather than an inability of the City to meet water demands). Therefore, in this WSA the maximum supply allocation is equal to the demand, including proposed project demands with no projected surplus in the demand without added projects scenario. The total system demand is calculated by adding the net development demand from Table 5 to the system demand projections from Table 3. Net new demand from development projects takes into consideration an apportioned total system water loss, as noted in Table 5. As explained previously, despite potable demand (without additional projects) remaining static at estimated baseline year 2023 levels, since total projected recycled water demand is estimated to decrease between 2020 and 2040 (according to the El Segundo 2020 UWMP), total future system demand projection (even *with* additional development projects) is expected to decrease between 2025 and 2040.

Table 7. Projected Total System Demand with Development Projects

Total System Demand, No Drought ¹	2020 ²	2025	2030	2035	2040	2045
Normal Year Demand Projection for El Segundo, AFY³	14,456	15,015	14,223	13,520	12,883	12,883
Net New Demand from Development Projects, AFY	-	134	728	1,095	1,144	1,144
Total System Demand, AFY	14,456	15,149	14,951	14,615	14,027	14,027
WBMWD Supply Assurance, AFY⁴	14,456	15,149	14,951	14,615	14,027	14,027
Estimated Remaining WBMWD Supply, AFY⁴	0	0	0	0	0	0
Est. Remaining Supply Reliability %⁴	0%	0%	0%	0%	0%	0%

Notes:

1. In some cases, values are rounded to the nearest single digit and totals may not align due to rounding.
2. 2020 demand is based on actual potable and recycled water use as reported in the 2020 UWMP.
3. 2025 through 2045 potable demand assumes 2018 and 2019 average imported water (demand) represents annual start year 2023 potable water use. Potable water use assumes no growth in baseline demand and no active nor passive savings; this is consistent with what the 2020 UWMP reported. Recycled water projections are based on 2020 UWMP Table 4.1.9: Total Water Demands recycled water estimates. Assumes no change in baseline potable demand from 2023 to 2045; and no change in recycled demand between 2040 and 2045.
4. Normal year supplies will equal the normal year demand with and without additional projects. There will be no excess or surplus supplies nor shortfalls.

Table 8 shows a comparison of the supply allocations from WBMWD and projected total system demands from Table 7 through the 20-year planning horizon as required by Water Code Section 10910. As shown in Table 8, there will continue to be sufficient supplies to meet all projected demand, including the additional demand generated from the proposed developments, in non-drought (normal), single dry and multiple dry water year conditions until year 2045.

In conclusion, the existing and planned future uses evaluated in this WSA will generate a net new combined potable and recycled water demand of 1,144 AFY by year 2045. This net new demand was calculated from a baseline 2023 City of El Segundo service area water demand. The combined potable and recycled water demand associated with the numerous aforementioned listed projects including the Downtown Specific Plan Update and Housing Element, and the existing and future uses evaluated in this WSA will be accommodated by El Segundo’s existing supplies during normal, single dry and multiple dry water years within a 20-year projection.

Therefore, this WSA concludes that there is “sufficient water supply” (per Government Code 664737.7 (a)(2)) available to meet the demands of the Downtown Specific Plan Update and Housing Element, in addition to all existing and known planned future uses evaluated in this WSA for the service area, during non-drought, single dry and multiple dry water years within a 20-year projection.

Table 8. Annual Supply Allocation vs. Multiple Dry Years Demand (AFY)

Year	Topic	Normal Year	Single Dry Year & Multiple Dry Year ¹	Year 2	Year 3	Year 4	Year 5
			Demand Reduction % ¹				
			Assumes WSCP Supply Shortage Level 1 10%	Assumes WSCP Supply Shortage Level 2 10%	Assumes WSCP Supply Shortage Level 3 15%	Assumes WSCP Supply Shortage Level 4 15%	Assumes WSCP Supply Shortage Level 5 20%
2020²	Actual 2020 Demand	14,456	14,456	14,456	14,456	14,456	14,456
2025	Maximum Allocation ³	15,149	13,634	13,634	12,877	12,877	12,119
	Demand (NOT Including Proposed Developments) ⁴	15,015	13,513	,513	12,763	12,763	12,012
	Demand (Including Proposed Developments' NET Demand) ⁵	15,149	13,634	13,634	12,877	12,877	12,119
	Excess/Shortfall (NOT Including Proposed Developments) ³	0	0	0	0	0	0
	Excess/Shortfall (Including Proposed Developments' NET Demand) ³	0	0	0	0	0	0
2030	Maximum Allocation ³	14,951	13,456	13,456	12,708	12,708	11,961
	Demand (NOT Including Proposed Developments)	14,223	12,801	12,801	12,090	12,090	11,379
	Demand (Including Proposed Developments' NET Demand)	14,951	13,456	13,456	12,708	12,708	11,961
	Excess/Shortfall (NOT Including Proposed Developments) ³	0	0	0	0	0	0
	Excess/Shortfall (Including Proposed Developments' NET Demand) ³	0	0	0	0	0	0
2035	Maximum Allocation ³	14,615	13,153	13,153	12,422	12,422	11,692
	Demand (NOT Including Proposed Developments)	13,520	12,168	12,168	11,492	11,492	10,816
	Demand (Including Proposed Developments' NET Demand)	14,615	13,153	13,153	12,422	12,422	11,692
	Excess/Shortfall (NOT Including Proposed Developments) ³	0	0	0	0	0	0
	Excess/Shortfall (Including Proposed Developments' NET Demand) ³	0	0	0	0	0	0
2040	Maximum Allocation ³	14,027	12,625	12,625	11,923	11,923	11,222
	Demand (NOT Including Proposed Developments)	12,883	11,595	11,595	10,951	10,951	10,306

Year	Topic	Normal Year	Single Dry Year & Multiple Dry Year ¹	Year 2	Year 3	Year 4	Year 5
			Demand Reduction % ¹				
			Assumes WSCP Supply Shortage Level 1 10%	Assumes WSCP Supply Shortage Level 2 10%	Assumes WSCP Supply Shortage Level 3 15%	Assumes WSCP Supply Shortage Level 4 15%	Assumes WSCP Supply Shortage Level 5 20%
2045	Demand (Including Proposed Developments' NET Demand)	14,027	12,625	12,625	11,923	11,923	11,222
	Excess/Shortfall (NOT Including Proposed Developments) ³	0	0	0	0	0	0
	Excess/Shortfall (Including Proposed Developments' NET Demand) ³	0	0	0	0	0	0
	Maximum Allocation ³	14,027	12,625	12,625	11,923	11,923	11,222
	Demand (NOT Including Proposed Developments)	12,883	11,595	11,595	10,951	10,951	10,306
	Demand (Including Proposed Developments' NET Demand)	14,027	12,625	12,625	11,923	11,923	11,222
	Excess/Shortfall (NOT Including Proposed Developments) ³	0	0	0	0	0	0
	Excess/Shortfall (Including Proposed Developments' NET Demand) ³	0	0	0	0	0	0

Notes:

1. In both the El Segundo 2020 UWMP and the West Basin 2020 UWMP no demand reductions are assumed in dry years, so there may be no need for dry year demand reductions, especially when planning for the most conservative high water-using scenario. However, per the 2020 UWMP water shortage contingency plan: Supply Shortage Levels 1, 2, 3, 4, and 5, may have up to 10%, 20%, 30%, 40% and 50% demand cutbacks, respectively. Shortage levels do not necessarily equate to dry year 1, 2, 3, 4 and 5, however, they may. Additionally, El Segundo has a sixth shortage level stage that may gain a 60% demand reduction. This analysis assumes some dry year demand reductions consistent with ongoing active conservation savings and water shortage contingency plan implementation savings, as well as aligning with both the West Basin supply availability and responsible water conservation missions of the water agencies. The 10%-20% dry-year system-wide demand reduction value considers the over 60% nonresidential uses (~55% industrial and ~15% commercial/institutional) in the service area and the intention that no sustained loss of business would be induced; rather more water would be purchased. Consistent with this assumption, is that water shortage measures targeting a 5-20% reduction in water use were implemented in May 2022 during the drought. Additionally, West Basin confirmed 15%-30% reductions in demand under level 3 of their Water Shortage Contingency Plan starting in 2022.
2. Actual year 2020 use per El Segundo 2020 UWMP Table 4.1.9: Total Water Demands. Includes potable and recycled water demand.
3. Maximum allocation is set to equal El Segundo's estimated demands with the proposed development projects. Per the El Segundo 2020 UWMP, West Basin 2020 UWMP and conversations with West Basin and El Segundo staff, any differences in 2020 UWMP published supply values and estimated WSA demand values represents required additional water purchases from WBMWD rather than an inability to meet water demands. Therefore, the maximum allocation is set to the demand including proposed projects value. There is no excess or shortfall anticipated.
4. Baseline potable demand assumes 2018 and 2019 average water use, no growth and no active nor passive conservation consistent with the El Segundo 2020 UWMP approach to potable demand. Assumes no change in baseline potable demand from 2023 to 2045; and no change in recycled demand between 2040 and 2045. Baseline potable water demands per 2020 El Segundo UWMP do not include passive and active conservation savings. Recycled water projection estimates are consistent with El Segundo 2020 UWMP Table 4.1.9: Total Water Demands recycled values.
5. This demand is the net added potable and recycled water demand from the proposed WSA projects plus the baseline projection per the row above. Baseline potable water demands per 2020 El Segundo UWMP do not grow nor include passive and active conservation savings.